

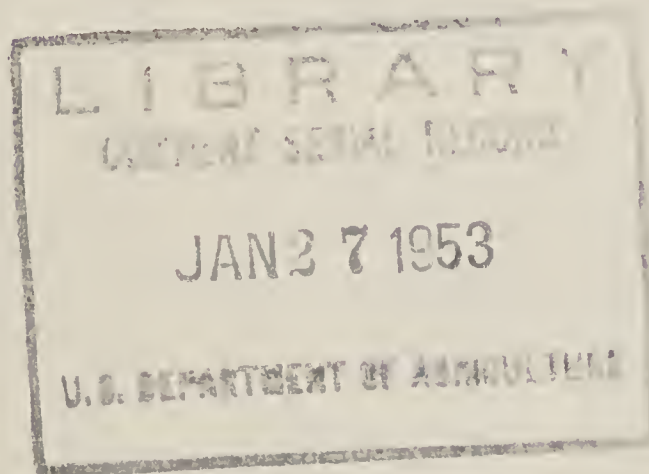
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REPORT OF COOPERATIVE EXTENSION WORK  
IN  
AGRICULTURE AND HOME ECONOMICS, 1951  
1952



UNITED STATES DEPARTMENT OF AGRICULTURE

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# United States Department of Agriculture Report of Cooperative Extension Work in Agriculture and Home Economics, 1952

UNITED STATES DEPARTMENT OF AGRICULTURE,  
EXTENSION SERVICE,  
*Washington 25, D. C., October 17, 1952.*

HON. CHARLES F. BRANNAN,  
*Secretary of Agriculture.*

DEAR MR. SECRETARY: I submit herewith the Annual Report of the Extension Service for the fiscal year ended June 30, 1952. Totals for activities and results are for the calendar year 1951.

Yours sincerely,

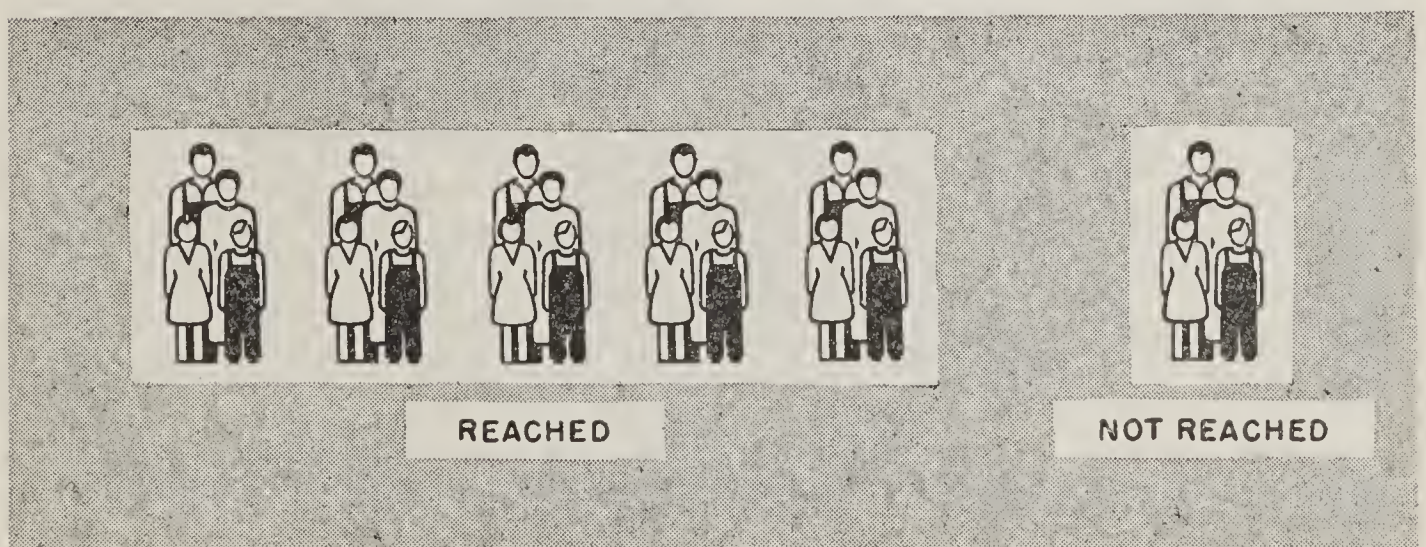
M. L. WILSON, *Director.*

## SPEEDING RESEARCH RESULTS TO FARM PEOPLE

Science is transforming the American farm, making it capable of producing far more than ever before. Such high agricultural production is one of the bases not only of our high standard of living but also of our industrial and military strength, and hence of our position in world affairs.

Heavy demands are being made upon the American farmer of the midtwentieth century. Ever-larger amounts of food and fiber are needed both at home and for our military forces and our friends abroad. But labor is scarce, and the amount of tillable land available has increased but slightly. The only answer is to make each acre and each animal unit produce better than they have in the past. And this can be done only through the use of the latest scientific information available.

### FARM FAMILIES INFLUENCED



In 1951 the Extension Service helped five out of every six farm families in the United States.



Taking such information to farm people is the job of the Cooperative Extension Service, whose more than 12,500 professional workers influence the lives of people in every important agricultural county in the Nation.

No "miracle man" is one Edgefield County, S. C., farmer, but his record in cotton production reads like a miracle. On 5 acres, he harvested 8,380 pounds of lint for an average yield of 1,676 pounds to the acre.

He had good soil to start with, but he reported that he made his outstanding yield by following these five important steps:

He (1) used good seed of a wilt-resistant variety; (2) left a thick stand, three to five stalks per hill, 8 inches apart; (3) used plenty of fertilizer; (4) controlled insects; (5) harvested early to avoid weather damage.

This Palmetto State farmer would have been unable to produce such a good yield if Extension had not shown him how.

Halfway across the Nation, a Missouri farmer had his soil tested to get recommendations for liming and fertilizing his cornland. As a result, his production on 65 acres was 2,000 bushels higher than in the previous year, and his average yield was 100 bushels to the acre.

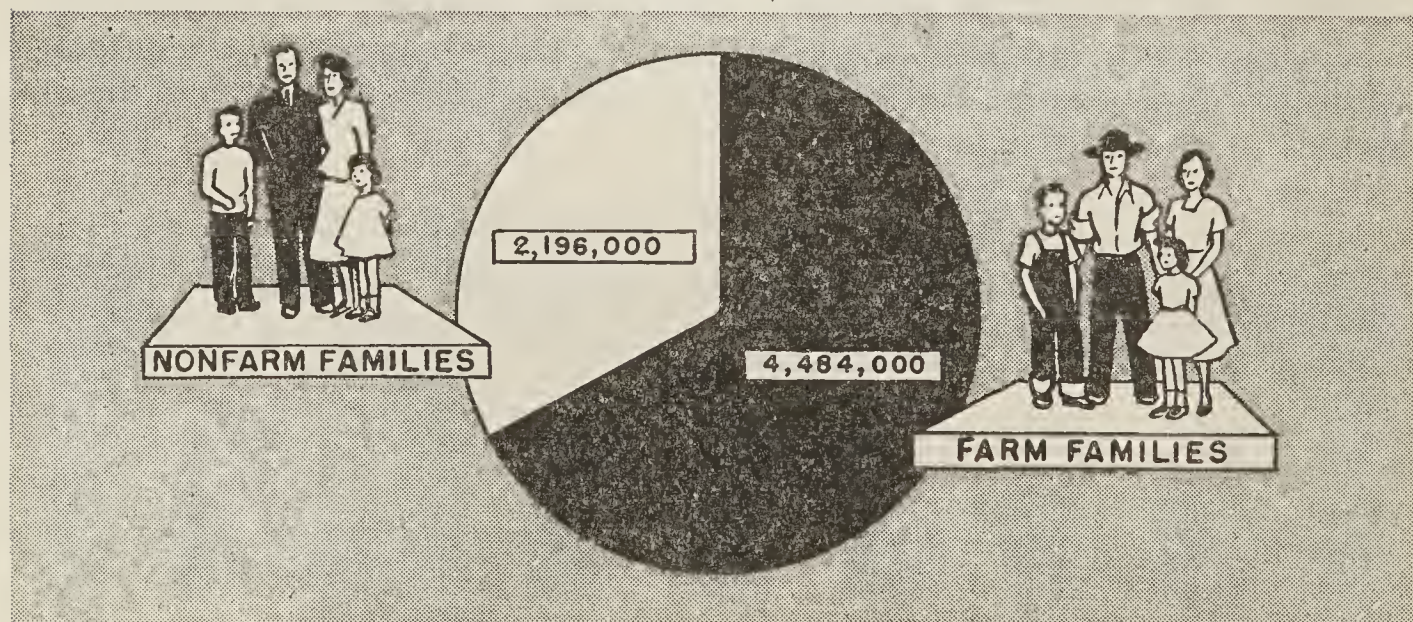
"The day spent in taking soil samples last April was one of the most profitable days of my life," he declared.

Examples like these could be repeated by the thousands. They come from every State and every agricultural county in the Nation.<sup>1</sup>

### Over 6½ Million Families Reached

In 1951 the Extension Service influenced a total of 6,680,000 families. Of these, 4,646,000 improved one or more agricultural practices and 3,295,000 improved one or more home practices as a result of extension activities. About four-fifths of the families changing agricultural

#### FAMILIES INFLUENCED



Of the total of 6,680,000 families influenced in 1951 by some phase of extension work, 67 percent were farm families and 33 percent nonfarm families.

<sup>1</sup> Because brevity is essential in this report, details of the work carried on throughout the country cannot be given. However, examples are provided throughout the report that indicate specific types of work in various States.



practices and about three-fifths of those changing home practices were farm families.

Training in agricultural and homemaking projects, as well as in social and civic activities, was given to 2,004,000 boys and girls enrolled in 4-H Clubs throughout the Nation. And some 301,000 young men and women, most of whom were enrolled in groups sponsored by organizations other than Extension, were given assistance with special problems.

### How the Job Was Done

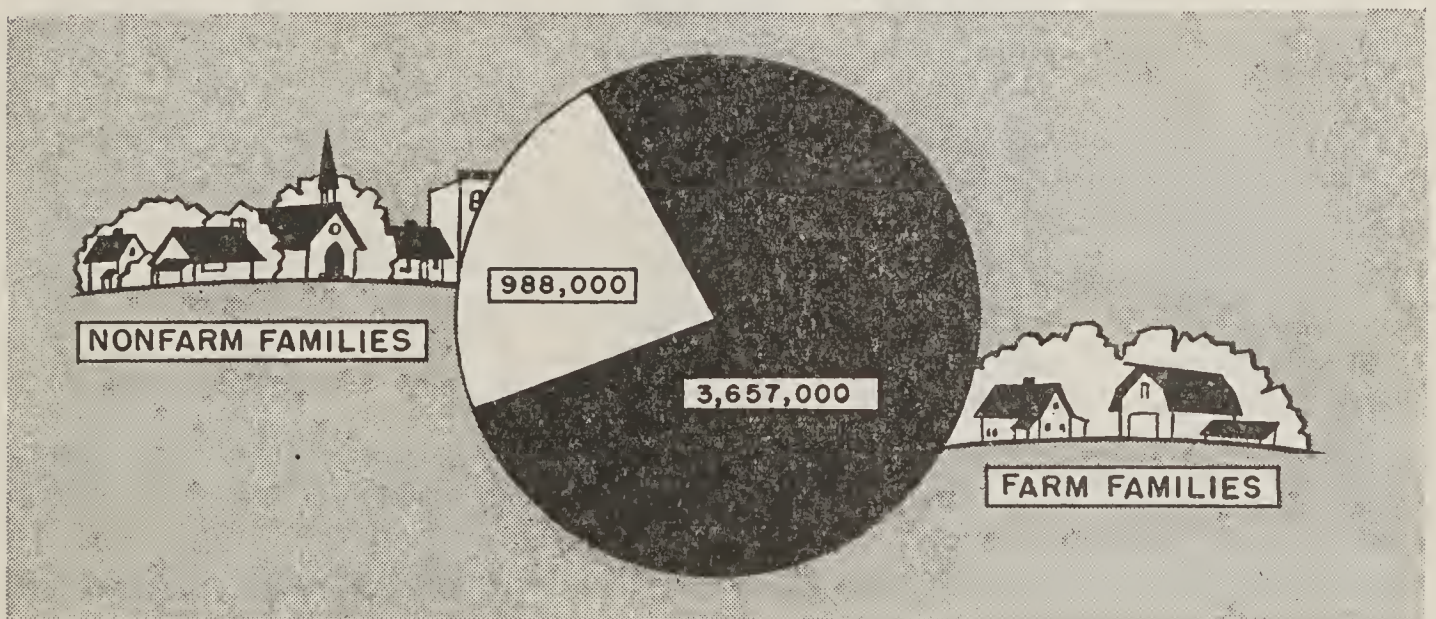
To reach and influence such large numbers of people, extension agents and specialists used every teaching device and method known to modern educators. The agents depended heavily on the help given them by 1,174,000 volunteer local leaders, many of whom had received "basic" training by coming up through the ranks of 4-H Club work. They wrote 905,000 news stories, made 165,000 radio talks, appeared on numerous television shows, and distributed more than 23 million bulletins, circulars, and pamphlets of their State agricultural colleges and the United States Department of Agriculture, as well as of other agencies. They held more than 2,460,000 meetings with a record-breaking total attendance of 75,520,000 persons, or an average of 31 persons per meeting.

Extension agents also depended upon personal contacts to get their message to people. They handled 8,565,000 telephone calls, 8,074,000 office calls, and made 3,668,000 farm and home visits. Altogether, they made more than 20,000,000 personal contacts during the year.

### Need for Information Increases

Today's farm is as different from the farm of 50 years ago as the modern automobile is different from the horse and buggy. Far more capital is needed to buy and operate the power equipment, machinery, and supplies required to till the land economically. Intensified cultivation has made insect, disease, and weed problems more acute. The need for ever-higher production per acre calls for the use of new

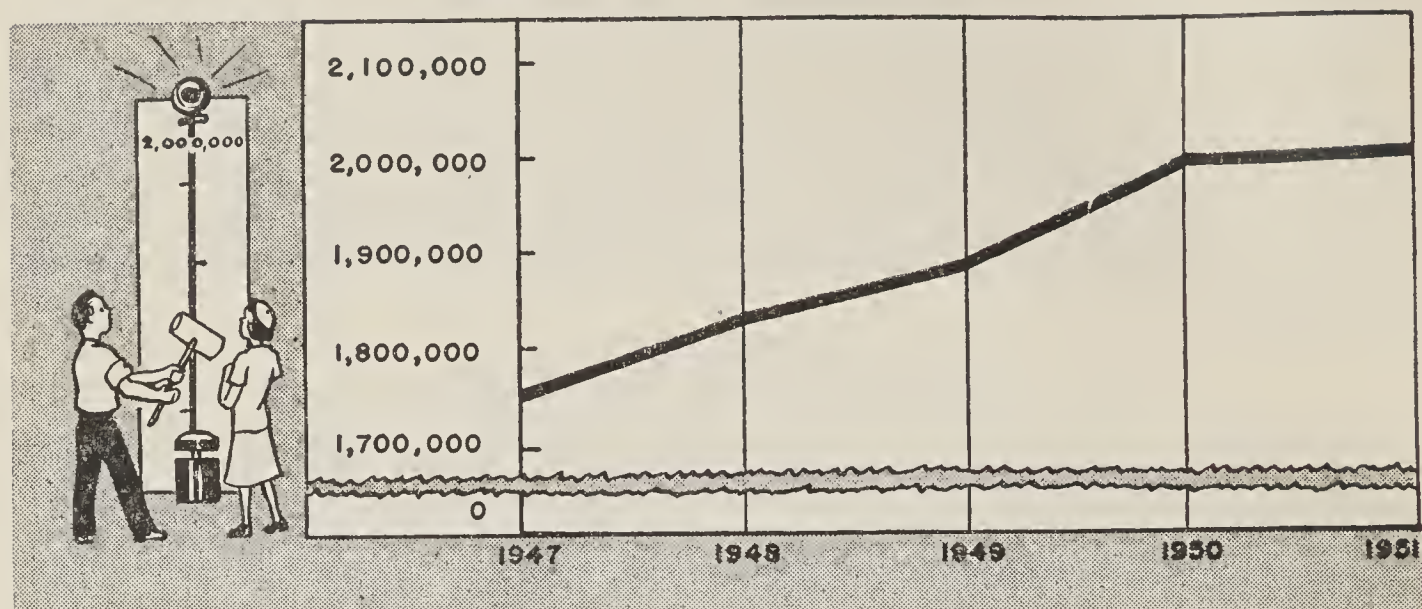
### ADOPTION OF AGRICULTURAL PRACTICES



Farm families in 1951 made up over three-fourths of the more than 4,600,000 families improving their agricultural practices as the result of extension activities.



## NUMBER OF 4-H MEMBERS



4-H Club enrollment continued to grow—from 1,760,000 in 1947 to more than 2,000,000 in 1951.

tools and new methods based on scientific findings. As the country's economic system has become more complex, the need for improved marketing of agricultural commodities has become acute.

Extension now reaches about 85 percent of all farm families in the Nation. Extension workers realize, however, that the other 15 percent need to be reached, and that an even better job must be done of reaching the 85 percent now being helped.

Extension looks back on its record with pride, but it realizes that greater challenges lie ahead.

### MAKING EVERY ACRE DO ITS BEST

Demand for food, feed, and fiber has been strong since the close of the Second World War. The Korean situation has increased foreign demands, and the steadily expanding national population, together with the high level of employment, has increased domestic demand. American farmers have been called upon not only to produce at record levels, but also to take care of their land in such a way that it will continue to produce at high levels for many years to come.

#### Field Crops

Agricultural experts recognized that in 1951 there was not sufficient cultivated land in the United States to produce the estimated food, feed, and fiber needed plus a normal reserve, at past average yields per acre. In addition, the farm labor supply was at an all-time low. To increase production per acre, extension workers gave special attention to improved high-producing varieties, improved cultural practices, fertilization, and insect and disease control.

Improved varieties of all field crops have made a major contribution to increased yields per acre. The introduction of hybrid corn has raised the yield of corn an estimated 15 bushels per acre over that of open-pollinated corn. From 1933 to 1951 the percentage of the total United States corn acreage planted to hybrids increased from one-tenth of 1 percent to 81 percent.



Yields of cotton were increased 82 pounds of lint per acre between 1910 and 1950. During this time the number of varieties planted across the Cotton Belt was reduced from 500 to 12. Selection of high-yielding strains and varieties accounted for much of the increase. In helping farmers toward attainment of the 1952 production goals, the Extension Service has emphasized maximum standardization of the higher-producing strains.

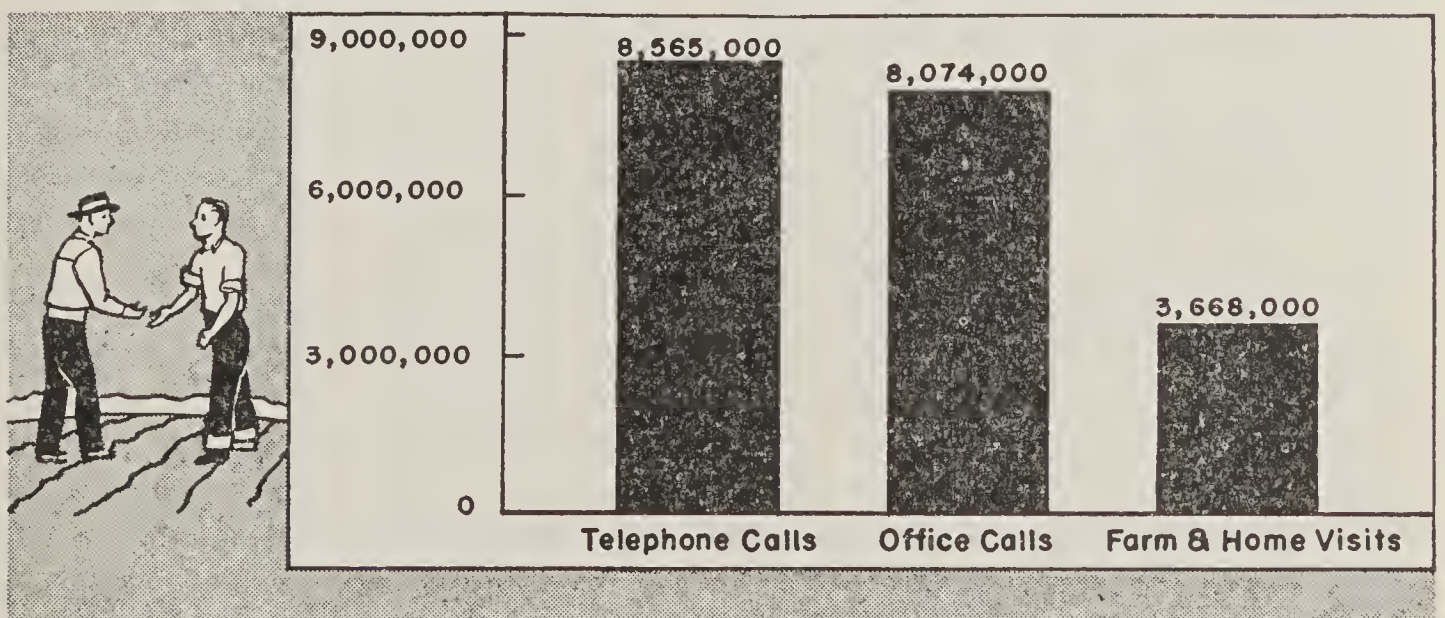
Improved cultural practices were emphasized by extension workers. A well-planned crop rotation system that includes a legume has become an established procedure. Synchronizing the number of plants per acre with the productivity of the land, together with proper cultivation and other science-based practices, has been important in raising the level of production per acre.

The proper use of fertilizer in conjunction with liming and other desirable practices, can bring about a greater increase in production of all crops than any other single practice. Likewise, it can make a substantial contribution toward conserving and improving the productivity of farm land. In 1951, extension workers assisted farmers in the proper use of fertilizer for many crops; among these were 773,000 assisted in the use of fertilizer for corn, 643,000 in its use for legumes; and 655,000 in its use for pastures.

Recognizing that yield and quality of crops are greatly influenced by the variety and quality of seed planted, Extension gave leadership and cooperated with other agencies and organizations in the production of adequate and dependable supplies of foundation, registered, and certified seed for all agricultural purposes.

In 1951 Extension gave help in the production and distribution of 499,200 pounds of foundation seed, 3,847,000 pounds of registered seed, and 133,320,000 pounds of certified seed. Expanded research is making available new and improved varieties of all field crops. Extension brought these varieties to the attention of farmers and helped them to develop seed programs whereby adequate and dependable supplies of these varieties could be maintained.

**PERSONAL CONTACTS OF EXTENSION AGENTS**



Extension's "personal contacts"—farm and home visits and telephone calls made by county extension agents, and office calls made by rural people to county agents' offices—were important in helping families to solve their individual problems.



The average yield per acre of No. 1 sweetpotatoes for South Carolina farmers in 1951 was 107 bushels, but the average yield for 4-H boys in Darlington County—high county in the year's production and marketing contest—was 217 bushels. When asked how he produced 280 bushels of No. 1's on 1 acre, the club boy who was highest in the contest, said simply, "I did what my county agent told me." This led to the observation that the 60-percent increase in sweetpotato production requested for 1952 could be reached without any increase in acreage if farmers generally would follow the county agent's recommendations.

Use of machinery has been an important factor in meeting the labor problem and in lowering production costs. Extension agents and specialists played an important role by advocating mechanization where practicable and by helping farmers make the best use of the machinery they buy.

### Vegetables and Fruits

New and improved techniques are constantly being developed in the production and marketing of vegetables. Extension workers evaluated and adapted these new techniques and methods to local situations and needs of the vegetable producer.

Each year brings new and improved varieties of vegetables, and demonstrations are needed to show their value. Trends in new varieties are toward disease and insect resistance and suitability for freezing and mechanical harvesting as well as toward high quality and yield. Variety demonstrations were one of the most important and most popular horticultural extension projects in practically all States.

The demand for more information on the kinds, placement, and use of fertilizers, especially where crops need additions of one or more minor elements, resulted in special attention to fertilizer practices. For example, in one State, 24 demonstrations on 7 crops in 7 counties were conducted using minor elements such as foliage sprays and soil applications. The economy of using high-analysis fertilizers was stressed.

Advances in the use of chemicals for controlling weeds in vegetables, as with other crops, have been so rapid and sales promotions so intense that extension workers found it necessary to restrain some growers from becoming too enthusiastic as well as to guide them in conservative use. Chemicals for killing potato vines and tops of other plants as an aid in harvesting received attention.

Fruit growers were faced during the year with low prices and mounting costs, and as a result they had to do everything possible to increase their efficiency. Since perhaps less progress has been made in increasing labor output with fruit than with most other kinds of farming, many growers have been cutting costs by removing unprofitable trees and striving for the highest possible production of the best quality on the plantings retained.

Use of chemicals as an aid in fruit production continued to increase. Not only were they used for disease, insect, and weed control, but also for thinning and as harvest sprays. In New York, extension specialists discussed chemical thinning at 33 community fruit meetings



attended by 2,469 growers. They also staged nine demonstrations on apples and peaches in six leading fruit counties. Some 5,000 to 6,000 acres of apples and peaches in New York were thinned chemically in 1951. The use of growth-regulating chemicals for reducing loss from premature drop of fruit just prior to harvest increased. Improved chemicals in harvest sprays were demonstrated and techniques explained by extension workers.

In Connecticut, 2 extension fruit specialists prepared 93 circular letters and bulletins and 27 news releases, and gave 40 radio talks. They attended more than 60 meetings where information was given directly to growers, made 427 farm visits, traveled 27,000 miles, and wrote 1,100 individual letters in direct answer to requests.

### **National Garden Program**

A national garden and home food preservation program was organized in 1951. According to a Nation-wide survey, there were about 17 million home-food gardens during the year. Of these, 5 million were on farms and some 12 million in city and suburban areas. Seed sales were up from 8 to 12 percent over 1950.

In 1952, under the leadership of the Federal and State Extension Services, the same program was continued. Various agencies of the Department of Agriculture and other branches of the Government as well as many private organizations united to further encourage Americans to grow more, preserve more, and use more vegetables and fruits and thereby contribute to better health, a sounder economy, and greater security. They were also urged to improve and beautify their home grounds and communities through the planned use of better lawns, flowers, trees, and shrubs. It is estimated that only 82 percent of farm families have home gardens. The 18 percent without gardens offer a challenge to Extension, as do also the thousands of new families without gardens in urban and suburban areas.

The Federal Extension staff promoted the program in various ways, chief among which was the publication of a monthly fact sheet—Garden and Home Food Preservation Facts. This fact sheet, distributed in an edition of 4,500, was sent to garden leaders throughout the country as well as to garden and farm editors, radio broadcasters, and other interested persons. It kept them informed regarding the progress of the program and supplied them with facts that could be used in writing, broadcasting, and televising garden information.

State extension services have carried educational programs in gardening, nutrition, and food preservation for many years, but in 1951 and 1952 they accelerated these activities and reached many people with factual information through meetings, publications, radio and television shows, and in other ways.

Reports of garden-seed sales for 1952 indicated an even greater gardening year than in 1951. In Arkansas, the over-all value of home gardens, both farm and city, was estimated at more than 25 million dollars.

County extension agents in Mississippi reported 180 adult and 353 4-H training meetings on garden subjects during the year. County-wide spring and fall vegetable and flower shows attended by 16,800 persons were one of the high lights of that State's garden program.



A "strawberries for home use" program was initiated with adults and 4-H Club members in North Carolina. Some 50,000 plants were ordered and set out in 30 counties.

### **Trees—An Important Farm Crop**

It is not generally realized that trees occupy as much farm land in the United States as several of the Nation's major field crops combined. This makes trees one of our country's most important farm crops.

Some 31¼ million farmers possess about half of our privately owned forest lands. The aggregate area totals about 184 million acres, of which 139 million are suitable for growing continuous crops of timber. These farm woodlands, although small, averaging 50 acres and ranging down to 1 acre, have a tremendous influence on whether the Nation obtains an adequate supply of forest products. They also serve as habitat for wildlife, provide recreational areas, and, if properly managed, contribute immeasurably to conservation of water.

Farm woodlands supply one-fourth of the total United States saw-log requirements, one-third of our pulpwood needs, and the bulk of fuel wood, fence posts, maple sirup, and similar forest products used on the farm and sold. In terms of monetary value, the forest crop ranks tenth among all farm crops.

Well-managed farm woods adequately stocked with desirable trees produce several times as much as woods that are not cared for. This means that farm woodlands that are close to market and occupy good growing soil are able to produce, under good management, several times their current monetary yield.

Extension's farm-forestry program during the year included woodland management, harvesting, marketing, and utilization of forest products; tree planting for future forest crops, for erosion control, and for protection to farmsteads, crops, livestock, and soil; wood preservation; production of maple sirup and naval stores; fire prevention and control; wildlife conservation; and forestry projects for rural youth.

The first Ohio tree-planting demonstration illustrates how extension forestry work improves farm values and strengthens the economy of the community. Thirty years ago, the Ohio extension forester helped to establish this demonstration—a red and Scotch pine forest planting—on an abandoned, eroded hillside on a farm in Tuscarawas County. The farm owner has continued to plant, until he has more than 100 acres in timber. The trees are now about 50 feet tall and 12 inches in diameter. A timber company was considering the purchase of the trees for use as telephone poles.

The Minnesota extension forester reported "Great strides have been taken in farmer appreciation of growing timber as a crop and in harvesting and marketing practices and procedures. In the timbered small-farm areas of northern Minnesota, income from woodlands is providing needed profitable labor outlets and cash income."

Extension workers assisted a school forest in Wisconsin in holding a timber sale on its 140-acre forest which had been acquired as a gift from Wood County in 1935. On 35 acres, 75,000 board feet of saw timber and 50 cords of aspen pulp and boxwood were marked for cutting on a selective basis. Although the sale is not yet complete,



it is estimated that \$1,500 will be received by the school from the sale of this timber. Another cut of about the same amount on a different area will be made in 2 more years.

In 1951 over 37,000 4-H Club members were enrolled in forestry projects involving 91,000 acres. Many thousands more received instruction and training in forestry and related subjects. Among adult farmers, extension activities included assisting 88,000 in reforestation, 40,000 in planting windbreaks or shelterbelts, 44,000 in making improvements through thinning and other practices, 25,000 in estimating and appraising timber, and more than 42,000 others in selection cutting, and producing maple sirup and naval stores. Extension farm-forestry work was conducted in nearly 26,000 communities.

Demonstrations at sawmills and discussion of problems have greatly benefited a number of operators in Georgia, Idaho, Kentucky, and other States. A small sawmill operator who was assembling a portable sawmill in Boundary County, Idaho, reported to his county agent that he learned more at an extension-conducted 3-day small sawmill school than he would have learned in several years from experience.

### Use and Conservation of Water

Increasing attention is being focused on water problems as a result of destructive floods in 1951 and extensive drought damage in both 1951 and 1952. The Nation is slowly learning that wise use and conservation of water are just as important to agricultural production as are wise use and conservation of land.

In the Southeast, farmers are finding out that even in years of average rainfall, irrigation will increase crop yields sufficiently in 1 or 2 years to pay for portable irrigation systems. Applications of water are saving more and more acres of permanent pasture from becoming parched and unproductive during summer dry spells.

In 1951, extension workers helped more than 55,000 farmers in 1,639 counties with irrigation problems. One of the most effective methods used was the field demonstration where modern equipment and modern practices could be shown. Some of these demonstrations were combined with a farm tour, during which good cropping practices, modern irrigation equipment, and better farm planning were stressed.

In some States the need for better conservation of the water supply was emphasized. In several of the large pump-irrigation areas the ground water is lowering at an alarming rate. In the Texas high plains more than 9,000 wells represent an investment estimated at 50 million dollars. Here the emphasis has been on conservation of the supply by better application methods.

Irrigation equipment must be installed according to the particular needs of the farm concerned. Extension agents and specialists assisted hundreds of farmers in the South and East in the selection of proper irrigation equipment and advised many others on the feasibility of irrigation on their individual farms. To many farmers in these States irrigation was an entirely new venture, and many costly mistakes were avoided through advice given by extension irrigation specialists. Great economic loss can result if improper equipment is purchased and used unwisely.



The Soil Conservation Service-Extension Service irrigation program, started in 1946, continued to provide leadership in the improvement of irrigation practices in the Western States. There has been an increasing call from other sections of the country for service of this type. Visual-aid material in the form of slides and charts was furnished to five State universities to assist in the training of students in irrigation practices. Ten personnel-training schools with an attendance of 371 were held for personnel of the Farmers Home Administration, Soil Conservation Service, Bureau of Reclamation, Production and Marketing Administration, Bureau of Indian Affairs, and representatives of colleges and private organizations. Six extension field demonstrations with an attendance of 632 were held partly as a personnel-training medium and partly for the benefit of irrigation farmers in the area. Nine training schools for farmers were held in areas where better land and water use are especially needed. Some 624 farmers took advantage of this training.

Extension workers helped more than 83,000 farmers in 2,349 counties with drainage problems. In irrigated areas of the West several million acres of once-profitable land are now waterlogged and impregnated with salts harmful to crops.

Extension workers advised regarding the reclamation of this land and assisted the owners with better application methods to reduce drainage losses. County agents assisted in the organization of drainage districts and with the lining of existing ditches by interesting enough farmers to obtain the services of a contractor with modern equipment to do the job at less cost.

In areas where drainage has been installed for a long time, extension activities were directed toward obtaining information on methods of cleaning ditches, helping interested contractors to clean ditches when enough farmers were interested, and in reorganizing drainage-ditch systems or maintaining them.

### **Progress in Insect Control**

Insects and diseases are major problems of modern agriculture. The entire Nation realizes this fact occasionally when boll weevils overrun the Cotton Belt, stem rust threatens the wheat crop, or a highly contagious and dangerous livestock disease breaks out in some section. Perhaps few persons realize, however, that there are more than 30,000 plant diseases capable of causing tremendous damage, and that insects annually cost the Nation about 4 billion dollars' worth of farm products.

The American people spent at least a billion dollars in 1951 to protect their crops, livestock, stored products, buildings, furnishings, and the health of man himself from the threat of insect pests and rodents. The Extension Service played a major role in the safe, effective, and economical use of the chemicals applied. The newer organic insecticides, although highly effective in the control of many insect pests, have greatly complicated educational work in this field. It is vital now that consideration be given not only to the effectiveness of the chemical but also to the protection of the person making the application, the ultimate consumer of the product, and the crops and livestock upon which the chemical is being applied.



The 60 extension entomologists in the various States spent about 7,500 man-days in the field during 1951 assisting county extension agents and the general public with pest-control problems. The complexity of this work can be appreciated better when it is realized that 30,000 proprietary insecticides have been registered for use and that approximately 6,500 different insect pests are involved.

Extension workers assisted farmers in about  $3\frac{1}{2}$  million instances with control of insects affecting their crops and livestock. It is estimated that as many nonfarm as farm people were assisted in insect control by approved practices.

At least 664,000 cotton growers were assisted in cotton-insect control problems—twice the number assisted in 1948 or any previous year. Data are not available for arriving at national savings as a result of this work. However, county agents in Alabama estimated that cotton growers in that State saved 35 million dollars through insect control during the year. The extension program emphasized the need for knowing the levels of insect populations as a basis for applying insecticides. As a result, growers saved thousands of dollars by withholding insecticides until the insect situation warranted their use. Special scouts were employed by the counties or by farmers in several States to examine cottonfields for insects and to teach cotton growers how to determine the insect situation in their own fields.

Grasshopper damage was less extensive in 1951 than in some previous years, but crops worth about \$1,500,000 were destroyed by 'hoppers and crops worth \$4,724,000 were saved by the use of insecticides. In this work it is estimated that each dollar spent resulted in a saving of about \$375.

New organic insecticides have made possible economical control of insects that damage low-value crops. For example, insect-control practices in Kansas were carried out on 9 million acres of grain crops to control 1 or more of 11 major insect pests. This saved Kansas farmers about 14 million dollars. Ohio farmers saved about 3 million dollars by controlling spittle bugs on some 150,000 acres of legume crops. Spittle bugs have become a severe pest in many States, although they were not recognized as a pest of legumes until recent years. Alabama farmers saved peanuts worth  $3\frac{3}{4}$  million dollars as a result of insect control. This crop was considered to be relatively free of insects until a few years ago.

Many States now have organized to control insect and rodent pests of stored grain, in keeping with the grain-conservation program. Several States have pooled their efforts to reduce losses from stored-grain pests. Kansas reported that  $15\frac{1}{2}$  million bushels of grain were fumigated. The State-wide program did much to bring about this effective result. Oregon reported that its program to control the vetch weevil saved vetch growers \$800,000 during the year.

Where the Extension Service spray program was followed in apple orchards in Pennsylvania, 97.6 percent of the fruit produced was clean and free from insect and disease damage. Unsprayed orchards produced only 8.7 percent of clean fruit. Where the extension program was followed partially, 87.1 percent of the fruit was clean. The average loss on the properly sprayed orchard was about 1.2 cents a bushel, whereas on the incompletely sprayed orchard the loss was 6.3 cents a bushel. Since the State's annual apple crop amounts to 100



million bushels, if all growers followed the extension spray program completely, returns from the crop would be increased by 5 million dollars.

In the Missouri Valley and other flooded areas the Extension Service cooperated with Federal and State health agencies in the control of insect pests affecting the health of human beings.

During the active season, a high percentage of county agents' calls related to control of these pests. North Carolina county agents reported 19,000 office calls and 14,000 telephone calls regarding insect control during the year. These numbers were typical of the calls received by agents in other States.

A new appreciation of insect problems was gained during the year by thousands of 4-H Club members, who participated in the enlarged 4-H entomology program, now Nation-wide in scope.

Extension agents gave considerable help during the year to beekeepers, seed producers, and fruit growers in the most profitable use of bees. Bees are necessary to pollinate. Because our colonies of bees have produced more honey than the present market demands, home demonstration agents are now teaching homemakers the many appetizing ways that honey can be used in the daily diet.

A bee yard was established at a 4-H Club camp in Florida. The yard was used for demonstration purposes, and it also produced enough honey to keep some on the tables at all the 4-H Club camps in the State.

### **Control of Plant Diseases**

The modern farmer thinks that he is bothered with many more crop and animal diseases than was the farmer of 25 or 50 years ago. To prove his point, he begins to tick off names such as stem rust, late blight, black shank, downy mildew, and fusarium wilt. Plant pathologists agree with this view in part. They point out that intensified farming increases plant-disease problems, just as human diseases spread more rapidly in a crowded population. But many diseases that seem new have actually been with us for a long time. Diseases seem more abundant partly because we are learning to identify them and recognize the losses they cause.

Many measures are being used to fight plant diseases. For some crops, treatment of seed before planting helps. For others, crop rotation is the answer. And for still others, use of resistant varieties developed by agricultural research is the solution. The problem has been complicated by the fact that one crop, such as tobacco for flue curing, may be susceptible to two or more major diseases. The new Dixie Bright tobacco varieties are helping growers plagued by both black shank and Granville wilt. Without these varieties, many farmers in the Southeast probably would have been forced out of the tobacco business.

Increasing awareness of the economic loss caused by plant diseases has caused farmers to become more interested in controlling such diseases. In 1951 county agents assisted 187,000 farmers in controlling diseases of cotton, 177,500 in controlling diseases of tobacco, 93,000 in controlling diseases of legumes, and 39,000 in controlling diseases of pasture grasses. The agents also responded to many calls for help



with diseases of trees, shrubs, and ornamentals, as well as with cereal, fruit, and vegetable crop diseases.

The Extension Service cooperated with other agencies of the United States Department of Agriculture and the Federal Civil Defense Administration in safeguarding farm animals and crops against biological warfare. The first line of defense is border and port inspection, accompanied by quarantine when necessary. A second line of defense is set up to spot infestations as soon as they appear and to stamp them out. For the detection of plant diseases, a plant-disease survey has been in operation for many years. It has now been improved and extended into a watch service to discover any unusual outbreaks of plant diseases as soon as they occur. In each State a qualified plant pathologist, often the extension specialist in plant pathology, has been designated to serve as the leader. Farmers are asked to report any unusual crop troubles to their county agricultural agents. The agents, in turn, refer important reports to the designated State survey leaders, who identify the disease and initiate appropriate action. If a serious new disease occurs, the United States Department of Agriculture assumes leadership. Similar services have been set up for insects and for animal diseases. Insect-outbreak reports are channeled through State and Federal entomologists.

### SAVING THE LAND FOR TOMORROW

Heavy as are the present demands being made upon American agriculture, they are not likely to diminish in the foreseeable future. Each day brings a population increase of 7,000 persons in the United States. Current population trends indicate that by 1975 farmers will have to produce the food and fiber needed to support a population of at least 190 million people, compared with the 1950 population of 152 million. And the job must be done on about the same amount of tillable land that is now available.

Producing heavily for current needs, then, is only one phase of the farmer's responsibility. The other is to take care of his land so that it will continue to produce heavily for many years to come.

In 1951, Extension carried on educational activities for soil and water conservation in 2,986 counties, including assistance to 2,418 soil-conservation districts. County agents assisted more than 133,000 farmers and ranchers with soil-conservation work based on definite farm plans. Attention was directed more than ever to problems of land care.

During the year both young people and women showed increasing interest in the land. Home demonstration agents assisted with soil-conservation educational activities in 281 counties. More than 21,000 4-H Club members used soil- and water-conservation practices, and a total of nearly 192,000 received training in conservation activities. Club members improved some 365,000 acres through terracing, strip cropping, and other practices.

Demonstrations received increased attention in both county and State events. In North Carolina, individuals and teams from 18 counties competed for the first time. "The boys and girls who competed not only learned to recognize the basic problems of soil and water conservation but they also gave much thought to the practical



solution of those problems," according to the extension soil conservationist.

A new type of extension publication appeared during the year in Oklahoma and Maryland, describing women's part on the soil-conservation "team." In both States, these leaflets were used in connection with special soil-conservation events.

Land judging became, for the first time, a widespread educational activity. Estimates are that some land judging was done in at least 10 States and that total participation so far has been about 50,000. Most of the persons taking part have been young people. The objective of land judging is to appreciate land quality so that it can be used fully and treated properly for sustained production. Patterned after principles followed in livestock judging, this activity has centered in Kansas, Missouri, Oklahoma, and Texas.

Through joint employment with the Soil Conservation Service, special arrangements, and employment by the Extension Service, approximately 50 extension soil conservationists are leading in the development of State soil-conservation projects. Their principal attention is directed to assisting county extension agents to carry out in an effective way the needed educational activities. In 1951 they gave an increased amount of time to helping organizations develop and carry out a wide variety of programs designed to advance soil conservation. The practices requiring most attention were land use, crop rotation, grassed waterways, contour farming, use of cover or green-manure crops, and drainage.

### **Green Grass Is Gold**

The Extension Service along with other agencies of the United States Department of Agriculture, the land-grant colleges, and cooperating groups, began early in 1951 to organize a Nation-wide movement that would improve grasslands as a means of strengthening the Nation through profitable balanced farming, sustained abundance, and the conservation of land and water resources. The first year of this cooperative effort bore unusually fine results. From the humid area of the Southeast to the high, dry plains of the West, grassland farming has captured the interest of not only the farmer but of business and professional groups as well. Many feel that this attention to grass as a crop is long overdue.

Fifty percent of the land area of the United States—or approximately a billion acres—is devoted to grass. Though a large fund of knowledge about grass is available, only a small portion of the Nation's grasslands can be classed as improved. Until 1951, most of the research and educational work had been on grass production, handling, storing, utilization, and its importance in conservation. Under the new cooperative program, more attention is being given to the economics of grass—its dollars-and-cents value—in a balanced system of farming.

The continued decline in the number of people engaged in farming, coupled with an accelerated increase in the population, makes it imperative that farmers have every possible assistance that will help them to increase production per acre and keep down production costs. So, efforts are not altogether to get more land in grass, but to get higher



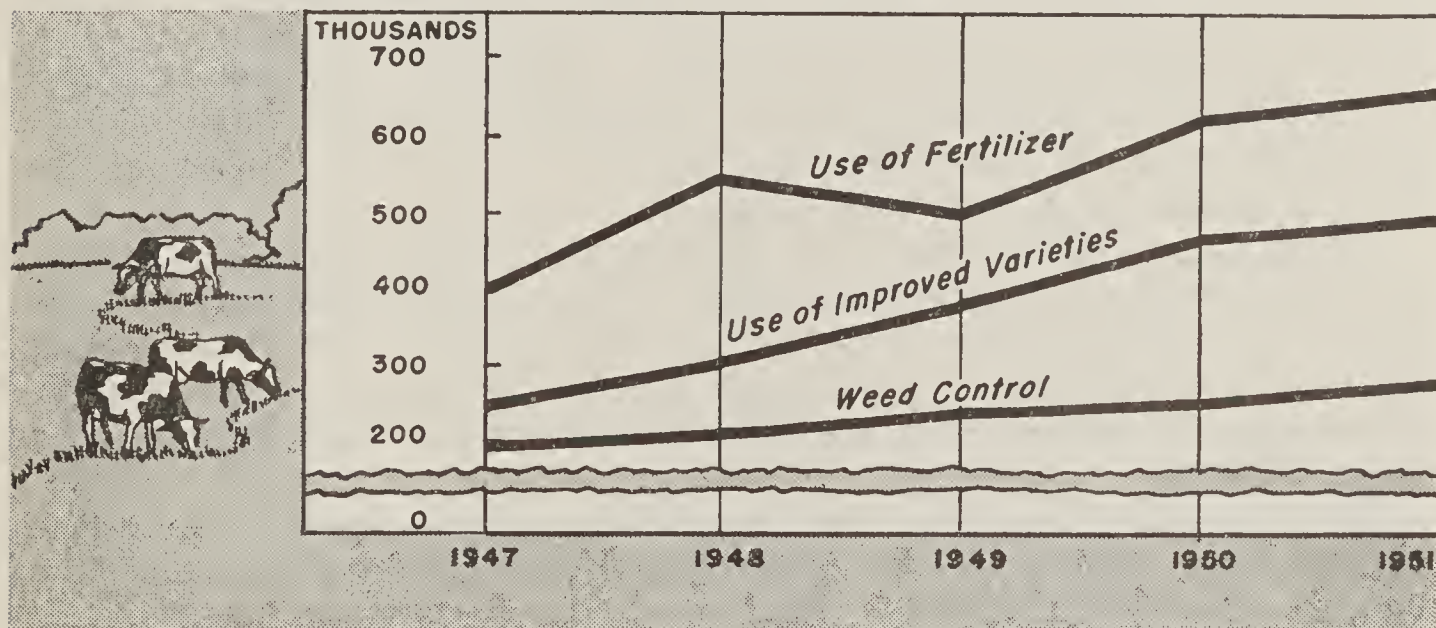
yields on those acres already in grass. Good farm-management principles are therefore essential.

The need for more and better livestock feeds is growing more urgent each year. Demand for beef is strong; the cattle cycle is in a rising phase, and cattle numbers have increased considerably during the past few years. Feed-grain supplies have not kept pace with the increase in livestock numbers. Since five-sixths of all beef production is from roughages, improvement in grasslands can alleviate to some extent the pressure on grain needs.

A good system of grasslands farming that includes a combination of legumes and nutritious grasses has been found to be a dependable source of carbohydrates and proteins. The value of total digestible nutrients (over 900 million tons) consumed annually by all livestock in the Nation is estimated to be 18 billion dollars. The concentrates are valued at 8 billion dollars and the roughage (grass, hay, silage, and so on) at 10 billion dollars. Since grass constitutes the bulk of livestock feeds, especially for dairy and beef cattle, it is our most important crop, not only for its money value but as a source of raw materials, for conservation purposes, and in other ways.

Although the extension program over the years has included activities concerned with various phases of pasture and forage improvement, great impetus was given the cooperative grassland movement in 1951. County agents were assisted by nearly 75,000 local leaders or committeemen in grasslands work. With the help of these leaders and extension specialists, nearly 497,000 farmers were aided in grassland improvement, such as obtaining improved varieties or strains of seeds; 471,000 were assisted in the use of lime; and 655,000 in the use of fertilizer. In addition, 39,000 were given help in controlling plant diseases, 76,000 in controlling insects, and 266,000 in controlling noxious weeds. Man-days of work devoted to aiding farmers with grassland improvement included more than 76,000 by county agents, nearly 4,300 by State specialists, nearly 2,900 by 4-H Club agents, and 77 by home demonstration agents. If one person had to do an equivalent amount of work, allowing 300 working days a year, the job would take him 277 years.

**FARMERS ASSISTED IN PASTURE IMPROVEMENT**



The number of farmers assisted by county agricultural agents in pasture improvement increased steadily from 1947 through 1951.



Interest of 4-H'ers in grasslands is partially indicated by a 30-percent increase in boys' and girls' pasture-improvement projects. Club members know that good pastures are fundamental in a balanced farming program that includes livestock projects and conservation measures. For example, a Nelson County, Va., family switched from cash crops to dairying and grassland farming. Coupled with good management all along the way, this has resulted in an increase in gross income from \$900 to \$5,000 a year. Today what was once a tobacco farm is the only grade-A dairy farm in the county. The family met the requirements to produce grade-A milk with an expenditure of only \$1,500. The average daily shipment from a 24-cow, 21-heifer herd is 30 gallons. Two cows and a heifer belong to the 4-H son, and the 4-H daughter helps to take care of the milkhouse. The head of this farm family gives much of the credit for his success in dairying to good pasture, of which he has 69 acres on his 147-acre farm.

Research throughout the country has shown that grass, like other crops, responds profitably to judicious use of fertilizers. In the past many acres that were badly leached or eroded were "turned to grass," and this resulted in low returns for the farmer. Row-crop farmers found long ago through extension teaching that they must use commercial fertilizers to produce profitable yields, and they are now finding that the same thing is true of grassland farming. Since legumes are nitrogen-gathering plants, they are the chief ally of grass in seeding mixtures. Lime and phosphorus aid legumes to provide much of the nitrogen needed for grass.

### ANIMAL AGRICULTURE ADJUSTS

With the demand for livestock products increasing, Extension is devoting considerably more attention to livestock production. This demand has continued strong and steady, influenced by population growth, continued defense production, and military activities, with national income favorable to increasing meat consumption in the diet of American families.

Other factors that have had a national influence on increased livestock production are the decreasing farm-labor supply available for other types of agricultural production and new techniques in obtaining the best returns from grasslands, which influence farmers to shift from cash crops to livestock production. With the increased emphasis on grasslands in soil-conservation programs, livestock production is the only means of converting the increased pasture and forage production to food and economic wealth.

Advantages of livestock and grassland farming were featured in extension work throughout the year, with emphasis also on consumer use of livestock products when they are in best supply in local markets. Civilian consumption of pork last year was 72 pounds per person, and production of hogs, cattle, and chickens was 6 percent or more above the 1950 level.

Production of livestock and livestock products engaged the attention of home demonstration agents and 4-H Club agents as well as of county agricultural agents. State and county extension workers devoted more than 300,000 man-days to livestock production work, which was conducted in every agricultural county in the Nation.



Present-day livestock producers depend heavily on research information. . They are concerned with vitamins, minerals, antibiotics, and trace elements in increasing gains, as well as with improved breeding of the various classes of livestock. Animal health programs, including control of insects, parasites, and diseases, are of great economic importance to cattle, hog, and sheep raisers.

A special campaign was conducted to eradicate brucellosis and other animal-transmitted diseases that affect the health of man. This program, conducted in cooperation with the Bureau of Animal Industry, the Public Health Service, and other Federal and State agencies, was of direct assistance to hundreds of thousands of livestock producers during the year.

Almost a quarter of a million farmers were assisted in improving their beef, swine, sheep, and other meat animals through selection and breeding advice. Members of 4-H Clubs were given guidance in raising more than 1 million head of livestock, including beef and dairy cattle, sheep, and swine, and over 9 million head of poultry. In Logan County, Colo., a group of cattlemen, bankers, and extension agents started a program of practical feeding for 4-H boys interested in beef projects. Fourteen boys took advantage of the opportunity and bought 39 feeder calves, which were fed out and sold on the open market. The average net profit for the entire group was above \$100 per steer. Two brothers worked together to complete 13 projects. "I am sure I learned as much or more than my boy during the feeding program," commented one father.

### **New Problems for Dairymen**

Defense mobilization has brought new problems for dairy farmers. Skilled dairy workers are scarce, and wages are rising. With meat prices relatively high compared with milk prices, and with culling to eliminate disease timely and less costly than formerly, some dairy farmers with insufficient labor for milk production have converted to production of livestock other than dairy cows. In some areas, however, the market for whole milk is growing; there is more labor on small farms, and dairy farming is increasing. This trend has been greatly aided by the grasslands program in the Southeast, where pasture grazing and grass silage from periodic clippings supply succulent feed at low cost on virtually a year-round basis.

The problems of dairy farmers are receiving high priority in extension work, not only because of their economic importance to farmers and the significance of grasslands in soil conservation but even more because of the importance of an abundant and wholesome supply of whole milk and other dairy products to the health of the Nation.

The demand for whole milk and dairy products must be met, not only through usual distribution but also to serve the increased requirements of the Armed Forces, the shift in population to new centers of defense production, and the continual population increase of the country—equivalent to adding a city the size of Philadelphia to the Nation every year.

Extension dairy work concerns many farm homemakers and is also a popular project in 4-H Club work. Therefore, home demonstra-



tion agents and club agents, as well as county agricultural agents and extension dairy specialists, join in the assistance rendered farm families engaged in dairy farming. During 1951 more than 130,000 man-days of work were devoted to extension dairy work by all such agents in virtually every agricultural county in the Nation. More than 80,000 farmers were assisted in dairy-herd improvement through selection of breeding stock from production records. Assistance was given to more than 6,000 breeding circles or farmers' dairy-herd-improvement associations with more than half a million members.

In addition, most of these and thousands of other dairy farmers were given assistance with improved methods of feeding dairy animals and the control of external and internal parasites and diseases. Dairymen were also given special assistance in furthering the animal-health campaign for the elimination of brucellosis, mastitis, and tuberculosis in the interest of human health as well as economic dairy management.

### Shifts in Poultry

Changes are taking place in the poultry industry. Costs have gone up, but the selling price of poultry products has declined. Along with growth of the national population, an increase in per capita consumption of poultry products has been taking place. This ever-growing demand is being met by increases in the number of birds raised, use of improved breeds and strains, and better feeding and management. Greater efficiency is being stressed in egg production, and mass-production methods are being adopted in broiler and turkey raising. The income per bird is smaller, but total income remains about the same.

There has been a shift from the small, neglected farm flock to commercial-type egg and meat production. Although about half the egg supply is still produced by small flocks, chicken and turkey production has swung largely to specialized producers.

Egg production per bird increased from 172 to 176 in 1951, partly as a result of improved breeding. Extension continued to be a strong ally of the National Poultry Improvement Plan, and a gradual increase in the rate of lay has been maintained. Extension workers advocated improved breeding, improved feeding to utilize new knowledge of nutrition, and many improved management practices. This included labor-saving devices such as automatic waterers and mechanical feeders, and the use of deep built-up litters.

About half the chicken meat consumed comes from commercial broiler producers. These farms are using the meat-type birds whose production was greatly stimulated by the chicken-of-tomorrow contests. Extension workers in all poultry-meat-producing States used this contest as part of their educational program.

Consumers in all areas turned to extension workers for advice on buying poultry products. Demonstrations were used with considerable success, and those with barbecued chicken proved very popular. The technique of cutting and wrapping chickens and turkeys for storing in the home freezer was demonstrated repeatedly. Mechanical refrigeration improvements brought better marketing methods.

Extension agents in 1951 devoted considerable time to poultry work with 4-H Club members, who are showing more and more interest in



poultry. During the year some 220,000 boys and girls carried projects in this field. Interest was also strong in the junior chicken-of-tomorrow project.

### **Animal Diseases and Insects**

Control of livestock and poultry insects and diseases is an important concern of extension agents and specialists throughout the country. Problems of this type are dramatized when epidemics occur, such as vesicular exanthema of swine, "air sac" in poultry, and so on. Air sac is becoming increasingly serious and caused heavy losses during the year in broiler areas along the eastern seaboard.

In two States alone, about 11½ million head of cattle, swine, and sheep were treated last year at an estimated saving of 11½ million dollars to the owners. Investments in livestock are far too heavy for farmers to risk losses from diseases and parasites. In increasing numbers, therefore, stockmen turned to Extension for vital pest-control information.

### **NEW PROBLEMS, NEW OPPORTUNITIES**

Use of more mechanical and electrical power has been the principal means of compensating for the diminishing farm-labor supply. The increasing use of farm tractors has also been one of the principal factors contributing to increasing the volume of marketable agricultural products through the release of acreage formerly used for horse pasturage and feed requirements. This is a gain in food-producing ability for the Nation, but the farmer must increase his gross income to include the costs of mechanization, tractor fuel, and electrical energy.

Extension assistance to farmers in coping with these mechanization problems has been steadily increasing with the advancing mobilization program. To meet the continuing reduction in skilled labor, farmers have demanded larger tractor units and have combined field operations for seedbed preparation, seeding, fertilizing, and pre-emergence weed control whenever possible. Other combinations are cultivation, fertilization, and postemergence weed control. Harvesting of hay, ensilage, grains, and in fact of every crop possible, is mechanized and adapted to labor-saving practices in the field, in processing, storage, and handling as far as practicable.

Extension help has been particularly valuable in mechanization of cotton, grasslands, and corn, including the now common use of heat for drying many kinds of crops to assure better quality as well as to facilitate early harvesting.

More than 100,000 farmers were assisted in selecting new farm equipment to meet their changing needs. More than 200,000 were assisted in making more efficient use of their mechanical equipment. Nearly an equal number were given instruction in maintenance, adjustment, and repair of farm tractors and mechanical equipment.

Tractor maintenance has been a popular project in 4-H Club work. Nearly 50,000 members and local volunteer leaders in 1,371 counties were given training in this subject during the year. The cumulative total of persons trained in the tractor program since 1945 stands at 210,000 members and 22,000 leaders. Altogether, nearly 100,000

4-H'ers were enrolled last year in farm-engineering activities, and articles made and repaired totaled over 220,000.

### **Safety—A Year-Round Job**

Farm safety is a year-round extension activity in every State and county reaching every family through adult and youth local leaders in every neighborhood. The work is conducted in cooperation with the National Safety Council, the National Fire Protection Association, and other national, State, and local organizations. As part of cooperative extension work the program receives assistance from the Department of Agriculture's Safety Council in the preparation of fact sheets. The program included all aspects of safety for farm people with special emphasis on safety at work, safety on the highway, safety at home and in recreation, and fire prevention.

More than three-quarters of a million families were directly assisted in recognizing and removing fire and accident hazards, and virtually all farms were reached through news stories, magazine articles, radio, and various contests. Nearly a quarter of a million farm families were assisted with instruction in first aid and home nursing.

More than 700,000 farmers cooperated in an organized program of training for the prevention of forest fires. Some 600,000 4-H Club members received training in accident and fire prevention, and conducted hazard hunts, demonstrations, and other educational services to reduce accidents in their counties and communities as well as on their home farms. Ohio integrated its safety program with its public-speaking activities. In 64 counties, more than 2,700 talks were given in local 4-H Clubs and 450 talks at county-wide meetings.

Every State agricultural extension service led a State-wide program through the three annual campaigns—National Spring Clean-Up Week, proclaimed each year by most State governors; National Farm Safety Week, proclaimed annually by the President of the United States the last week in July; and National Fire Prevention Week, also proclaimed annually by the President.

### **Learning To Use New Tools**

Though most farms in the Nation now receive central-station electricity, it is still a brand-new tool for a majority of them. Extension workers are devoting an increasing amount of time to the task of helping farm people learn to use this tool most effectively. In 1951, county workers assisted 333,000 families in 2,055 counties in the selection and use of electric lights and home electrical equipment. They also helped more than 100,000 families in 1,551 counties in the use of electricity for income-producing purposes.

It is estimated that about 85 percent of the electricity used on farms is used in the homes. On farms where electricity has been available for many years, its usage outside the home is far greater. The need for increased farm production and the continually diminishing farm-labor supply have caused farmers to request information concerning the many ways in which electricity can save labor and improve the quality and quantity of farm products.

The electric-farming campaign sponsored by the Rural Electrification Administration has called farmers' attention to the many ways



that electricity can help them increase their income. Many manufacturers of farm electrical equipment are small and do not have national advertising, distribution, or service. Extension workers often were called upon to assist farmers in locating a source of supply for the electrical equipment they needed. Another problem reported by several States is that generation and transmission facilities have not kept pace with the increase in farm use of electricity. In such cases extension workers were called upon to show farm people how to make the best use of the electricity they had, how to prevent damage to their equipment, and how to make it operate efficiently under such conditions.

There has been a steady growth in the use of sprinkler irrigation in the East, and electricity is called upon to do much of the pumping. County agents and extension specialists were called upon to assist in selection of pumps and motors that operate at the highest efficiency. They also were called upon to furnish information concerning the installation and selection of water systems and the installation, selection, and use of laundry equipment, hot-water heaters, bathroom equipment, and automatic watering devices for livestock.

In Georgia, extension agents helped 2,370 farm families to obtain electricity. They helped more than 16,000 families in the selection and use of electric lights or home equipment, and aided nearly 5,000 families in the use of electricity for income-producing purposes. The latter figure, considerably larger than that for 1950, illustrates the growing interest of farm people in using electricity for home processing of products. The agents aided nearly 3,000 families in installing water systems.

The achievements of many 4-H Club boys and girls through their electric projects is dramatized in the record of a 17-year-old 4-H Club boy in Kansas. He gathered all the information he could on home wiring, and when his family moved to a new 600-acre farm, he was able to supervise the installation of all wiring on the farm. He also built electric pig and poultry brooders, helped to install the water system, built table lamps, and is now capable of repairing many electric appliances.

Extension workers have been called upon for much information and assistance in connection with the rural telephone program. County workers reported that they assisted 80,000 families in 932 counties in obtaining telephone service or improved telephone service. Of these, nearly 5,000 were in Georgia alone. In Craighead County, Ark., the county extension workers, working with home-demonstration clubs, the county farm organization, and the Rural Electrification Administration, signed up 132 rural members for a telephone cooperative. More than 100 persons representing 12 communities attended a county-wide meeting in Lawrence County. Committees were appointed in Randolph County and several townships completed rural telephone surveys.

### **Cotton Mechanization Progresses**

To meet defense needs, United States farmers produced more than 50 percent more cotton in 1951 than in 1950, and they did it with considerably less labor. Such an achievement was made possible through increasing use of mechanization. In 1951, 15 percent of



the cotton crop was harvested mechanically, and in California the figure was 53 percent. This method of harvesting is expected to increase, and the cotton crop to be more fully mechanized during the next few years.

Without the improvements that have been made in the ginning industry, the progress that has taken place in cotton mechanization would not have been possible. Extension cotton grade improvement work across the Cotton Belt has been a major factor in getting ginners to accept and utilize improved machinery and operational technique.

Each year the cotton crop is harvested rougher and with more trash than the year before. This fact complicates and increases the drying, cleaning, and ginning problems. The volume of clean, hand-picked cotton has become smaller each year. In many areas there is no harvesting of this type, and in virtually no State is more than one-third of the crop clean hand-harvested.

Imperfections in ginning machinery and operating practices cause what is known as rough preparation, which lowers the quality and value of cotton an average of \$10 a bale. From 1939 to 1946, rough preparation averaged 7.1 percent; from 1947 to 1951 it averaged only 2.6 percent. Extension's cotton grade improvement program has been directly responsible for this reduction in rough preparation—a reduction that brings cotton growers an extra 5 million dollars or more each year.

Through improved ginning machinery and better trained operators, North Carolina reduced rough preparation from 23.3 percent in 1944 to 3.1 percent in 1950. The figure was lowered even further—to 1.1 percent—in 1951. As a result, growers received an extra million dollars or more for their crop during the year.

The Extension Service has worked with the cotton-ginning laboratories of the United States Department of Agriculture to bring about the quickest possible adoption of new machinery and new methods at commercial gins. Seed-cotton driers that add 1 to 5 dollars to the value of ginned lint were standard equipment in 6,000 cotton gins or about 75 percent of the total active in 1951. It is estimated that gins equipped with seed driers processed at least 90 percent of the total cotton crop, which increased the value of lint 30 million dollars. Virtually all gins in the country are equipped with extractor feeders.

A device for lint cleaning after ginning was introduced at commercial gins for the first time in 1948. Use of these machines has greatly expanded since then, and it is estimated that more than 2,500 of these units have been placed in about 600 gin plants that processed more than 10 percent of the 1951 cotton crop. Other equipment is also being installed to aid in meeting the problems of new varieties, mechanization, and rough harvesting.

Ginning specialists and county agents assist ginners in selecting proper equipment to produce high-test grades in each of the areas of cotton production. County agents in 454 cotton-producing counties gave assistance to ginners operating more than 5,000 gin stands in 1951. Typical of services by State specialists was the development by the Extension Service and adoption by the industry-wide better ginning committee of the four points on how to get better grade cotton without fiber damage. These points are: (1) Maintain uniform loose rolls,



(2) keep overflow to a minimum, (3) use only necessary cleaning equipment, (4) use only enough drying to insure smooth ginning. These basic recommendations for cotton-gin operation were adopted by all sections of the cotton-ginning industry.

During the year, Extension sponsored hundreds of meetings throughout the Cotton Belt to give farmers information on mechanization, defoliation, harvesting, and ginning for higher returns. Extension supplied leadership in the fire-prevention phase of the cotton-improvement program from producer to consumer. Savings to the industry from this program are difficult to measure, but reports indicate that losses have been greatly reduced during the past 5 years. Continuous efforts by extension workers to reduce cotton-gin accidents have resulted in the installation of belt guards and other safety devices. As a result of extension efforts to reduce rolling, big-ended, and overweight bales, ginners have become conscious of losses from these sources and are correcting this trouble.

State and Federal ginning specialists last year visited 1,718 cotton gins and participated in 405 meetings with an attendance of 60,000. Twenty-two gin operators' schools were held in 9 States. Help also was given in planning and staging the first mid-South gin exhibit, attended by some 1,600 ginners from nearly all Southern States.

### **THE BUSINESS SIDE OF FARMING**

The successful farmer of today must be more than a tiller of the soil; he must also be an astute businessman.

For example, timely economic information on prices, production, and marketing situations, Government regulations, and the like has become as essential to the operator of a farm business as information of a scientific and technical nature. Agricultural policy, farm programs, and other conditions outside the farm must also be recognized by the farmer, as well as changes in market supply and demand. Much of this information is complex in nature and must be presented in a way that will make it as useful as possible.

The Extension Service continued to fill this need during the year through what is known as its outlook work. This is an information service that brings together the facts pertinent to a given situation from all known sources in a form that will be most helpful to the person who needs it. Most States prepare an annual statement covering the probable outlook for the years ahead. This helps farmers and other businesses working with agriculture to make their long-time plans with a better knowledge of what is likely to happen. These annual statements are supplemented by current periodicals and special radio and press releases. All are woven together into a well-rounded, year-round "outlook" service of bulletins, current periodicals, special releases, press articles, and radio comments. Continuous use of this information is made in public meetings of farmers, on tours, and during farm visits and office calls. Practically all farm families are reached with such information in one or more ways.

### **Records and Taxes**

Since farming is a business, record keeping is an essential activity for the successful operator. Accounting aids and instructions in how



to keep farm-business records and to use them have been a regular part of extension work for many years. Account books and instructions for using them are available in most county agents' offices. Organized projects have been developed in many counties to help groups of farmers summarize and analyze their records at the end of the year. Farmers' books are sometimes made available to the State agricultural college for study and for the preparation of reports to be used with other farmers. These reports show the reasons for variations in income, and offer an opportunity for individual farmers to compare their results with others. These comparisons show the strong and the weak points in the business and serve as a basis for making changes that will increase income.

Demand for accounting work in a number of States has exceeded the means of the Extension Service to provide it without some financial assistance from the farmers themselves. This has resulted in the formation of farm-accounting associations, primarily in the Midwest, financed largely by farmers who cooperate in the hiring of a field man to help them with their accounting and management problems.

Income-tax provisions now affect most farmers. A good system of accounting provides the only sound basis for reporting net farm income for tax purposes. This use for farm accounts has greatly expanded the educational program of the Extension Service.

There also is a need for explaining the provisions of income-tax laws that apply specifically to farmers. To save time and expense, regional bulletins are prepared each year and approved by the Bureau of Internal Revenue. So that each State can have the supply it needs, these bulletins are published cooperatively by the States concerned. They serve as the basis for an educational program with farmers and others, particularly with those who help farmers make out their tax returns. Training schools for tax consultants, held in cooperation with the Bureau of Internal Revenue, are becoming a regular part of extension activities in a number of States. This is another example of how Extension works through others and thereby is able to extend its aid to more people.

### **Planning Pays**

Extension helped farmers to do a better job of business planning, aiding them in making wise management decisions based on a knowledge and understanding of all the factors involved. Young farmers just getting established like to look ahead several years and plan a farm program that will make the best use of the resources available to them. Older farmers are faced with major adjustments in their businesses because of changed conditions. All farmers have year-to-year decisions to make in order to keep their businesses profitable.

Extension's farm-planning work brings together and helps a farmer apply the known facts to his own situation and attempts to improve his ability in making management decisions. This work includes the teaching of farm business principles, training in problem evaluation and decision making through the budgeting process, and actual help in making farm plans and carrying them out.

The intensity of the work varies with the need. The objective is not so much to provide the farmer with a basic farm plan to follow as it is to develop his ability to make sound decisions continuously.



### **Emphasis on Efficiency**

With production costs high, efficiency is a major concern of every farmer who expects to stay in business. One of the best means yet tried by the Extension Service for improving farm-operating efficiency is work simplification. This is essentially the application of industrially developed techniques of scientific management and methods of engineering to farm work. The objective is to help farmers make better use of available labor, materials, and equipment and thereby reduce the time and energy required to do farm work.

The approach is to study and question systematically the work methods used in performing specific jobs in order to eliminate unnecessary work, simplify hand and body motions, provide more convenient work areas, improve the suitability and use of equipment, and organize work routines to make full use of men and machines. Such educational work has shown savings to farmers of 15 to 20 percent in hand-harvesting jobs, from one-quarter to one-third in chore work in and around buildings, and substantial savings in time and ease of performing field jobs involving crews of workers and machines. It is an attempt to consider the work involved in the performance of specific farm jobs in relation to cost, quality of product, ease of work, and available resources.

### **Leases and Father-Son Agreements**

Leasing arrangements are essential on farms operated by persons other than the owner. One of the functions of Extension is, therefore, to encourage written leases, to provide forms for recording agreements, and to explain the advantages and disadvantages of various leases for various purposes. The goal is to get lease arrangements that will be fair to both landlord and tenant, encourage rapid adjustment to changed conditions, and result in conservation and development of resources on the farm. In some areas, particularly the South, major changes are taking place in rental systems as a result of livestock development and mechanization. This calls for greater emphasis on landlord-tenant relations as a phase of extension work.

The number of young men remaining on the farm is increasing. At the same time, many older farmers desire to work out some practical way to provide for a transfer of farm property satisfactory to all members of the family. Thus there is great need for better understanding of what makes a father-son partnership work successfully. Most States have publications on this subject, but much of the assistance in actually working out agreements must be done on an individual basis. Many county agents devote considerable time to this problem.

### **Marketing**

To stay in business, the farmer must not only produce; he must also sell what he produces at a profit. Thus the field of marketing is of major concern to the farm family.

Interpreting and disseminating marketing information is an important phase of Extension's educational work in all States. Farmers and handlers look to Extension as a reliable source of information in making their marketing decisions.

Adoption of better marketing practices is improving the quality of farm products available to consumers. As an example, 12 States are carrying on active programs to improve the marketing of sweet corn. Through the adoption of new types of packages that hold a refrigerant, premiums of 5 to 10 cents a dozen have been received by farmers; the cost of packages has been reduced, and the volume sold at retail has increased, because city consumers now get a more nearly garden-fresh product.

In livestock marketing, a number of States conducted demonstrations on grade standards for feeder and slaughter cattle, calves, and carcasses. The results were improved quality of animals sold and higher returns to producers and feeders. The production and marketing of meat-type hogs, which were in demand by consumers, received increased attention. In Ohio, 71 hog-grading demonstrations were conducted involving 12,700 hogs. These hogs were sold on a graded basis with the choice ones bringing a premium and the inferior ones taking a discount.

In egg marketing, considerable emphasis was given to maintaining egg quality. Because of this increase in emphasis, 21 egg institutes were held in Minnesota during the year to deal with this problem. This was twice the number held the previous year. Reports from eastern market buyers indicate a substantial improvement in the quality of eggs and ready-to-cook chicken coming from distant markets during the past few years.

In most States where milk-marketing orders are in operation, extension economists provide factual information for hearings and at other times explain the operation and pricing procedure to producers. In Indiana, work simplification in receiving milk was stressed during the year. In one plant the receiving crew was reduced from three to one man with net annual savings of about \$3,000. The change paid for itself in 6 days. In another plant the crew was reduced from three men to two during the summer and to one man during the winter. This change paid for itself in about 6 months.

Educational work is being conducted with food retailers in about one-fourth of the States. Emphasis generally is placed on better merchandising and more efficient handling of perishable farm products. Attention also is given to sanitation, better understanding of production problems and movement of products from the farm to the retail store. Retailers are also taught to inform consumers about certain uses and care of products in the home to preserve quality better and provide the family with a more nutritious diet. Primary emphasis has been placed on fruits and vegetables; however, at the request of the trade, increased attention has been given to work with red meats and poultry products.

As a result of Extension's consumer food-marketing program, more satisfied food shoppers and farmers are able to market their products in a more orderly and efficient manner. In Seattle, Wash., in the fall of 1951, when small eggs were in heavy supply and offered the consumer the best egg buy, consumers were given information regarding this fact and how to use these eggs. Surplus small eggs moved readily in the Seattle markets, while at other markets these eggs moved slowly.



Thirty consumer food-marketing specialists now work in 24 States and Puerto Rico with funds provided by the Agricultural Marketing Act of 1946. Where market centers serve several States, the program is conducted as a regional project.

Because about 83 percent of the Nation's food buyers are located in urban areas, most of the educational work has been concentrated in these communities. The Extension Service is being looked to as a source of reliable and pertinent information for food shoppers. Radio, press, and television continue to be the major media for widespread coverage.

In 1951, special emphasis was given to training local leaders and to work with small institutions such as nursing homes, nursery schools, and homes for the aged. A typical example of the leader-training work was carried out in Alabama. Nearly 800 local leaders were trained and had the responsibility of giving food-buying information to their home-demonstration-club members. The demonstrations were on "labels," "stretching the food dollar," and "selecting and storing fruits." In New York, the Extension Service is issuing a weekly release to 1,044 small institutions giving them timely information on buying and using food for quantity feeding. In Puerto Rico, in addition to providing demonstrations on care and use of food at three information centers and giving short courses to adults on better buying, 173 consumer-marketing radio programs were prepared and broadcast during the year.

Use of such information by other public workers is significant. In one metropolitan area a large labor union reprints part of the weekly release coming from Extension and distributes 1,000 copies a week to those who visit its nutrition clinic. One radio women's director who uses the releases for her program commented: "It's the information on the food markets that I need in order to know what buys to suggest to the listeners to my food-news broadcast." One staff writer for a large paper made this comment: "Just what I need when the editor says he wants another story to put on page one that will have something of interest for a lot of people." In Norwich, Conn., it was found through a survey that 57 percent of the households read the weekly food column *Spending Your Food Dollar*.

### Other Activities

#### *Credit*

Heavy capitalization is needed in many types of farming. This poses problems, particularly for young men just getting started and for farmers who wish to make major adjustments because of changed conditions. Credit agencies are sometimes slow to make loans, particularly when the need for increased capital is not fully understood. Extension specialists in many States help to solve this problem by holding conferences for the benefit of credit-agency representatives. At these conferences specialists provided technical information on sound land use, farm management, and the economic outlook. Such information helped the agencies and enabled them to provide farmers with more adequate credit service. State bankers' associations, the Federal Reserve banks, and the Farm Credit Administration cooperated in this work and usually became cosponsors for these conferences, thus assuring attendance from the lending institutions.



County agents and other extension workers also assisted farm families with financial problems. This was done through information and counsel in making farm and home financial plans, guidance in making adjustments in type and size of farms, help in getting started in farming for young people, and information on sound use of credit and available sources of loans.

### *Cooperatives*

Extension gave educational assistance last year to more than 1,000 groups interested in organizing cooperatives. This help included information and guidance in analyzing their situation to determine whether or not to form an association; in developing an adequate plan of operation including sound financing for the cooperative; in getting suitable incorporation papers, and bylaws adopted; and in completing the organization and starting operations.

Extension also helped on educational problems of more than 9,000 cooperatives already operating. County agents gave assistance on many local problems, particularly with annual meetings, keeping members informed, and getting a better understanding of cooperatives' place in the community among urban people. Extension specialists provided technical information related to the products sold or supplies bought for farmers; on plans for improving the organization both as a cooperative and as a business such as accounting, reporting, and financing; and programs for further training of directors, managers, and employees.

### *Labor problems*

Variations in weather conditions, business conditions, military requirements, and crop production keep the labor situation constantly changing. Extension during the year kept in touch with these various factors and worked with agencies having direct responsibility concerning the use of agricultural manpower in developing programs designed to meet the situations that arose. As noted elsewhere, agents and specialists also devoted considerable effort to bringing about a fuller and more efficient use of the farm work force, and particularly to helping migrant farm workers and their families.

### *River-basin programs*

At present the Extension Service is cooperating with educational work in the Tennessee Valley area; Arkansas, White and Red River area; Missouri River area; Columbia River area; the New England-New York area; and similar regions. Such work is not with farmers alone but with the public in general, since the conflicting issues involving land and water use can be resolved only through group action.

The purpose of extension education is to bring together the facts bearing on the situation and help to develop an understanding of the issues involved and of the implications that are likely to result from various courses of action.

### *Public policy*

Agricultural-policy and other public programs affecting agriculture are commanding more and more time of extension workers. Some issues of current significance include farm-price supports and related programs, social security for farmers, Federal aid to education, taxation and public finance, inflation, and monetary policies. Exten-



sion's role is to arrange for and guide discussions on public policy, clarify the issues, introduce factual material, and indicate the choices and alternatives available. At present it is not possible for Extension to do much in this field, but a real start has been made. Special attention is being given to international relations and world affairs, with Extension's acquainting people with programs such as those of the Mutual Security Agency and of the United Nations, UNESCO, and F'AO. Meetings are held, tours conducted, and moving pictures shown to keep people informed of what the United States is doing in world affairs, why it is being done, and what is being accomplished.

#### *Local government*

Extension is also concerned with local public problems, including improvements in the functioning of government on the township and county level. Such educational work covers land classification as a basis for tax assessments in Montana, farmer-advisory committees on the development of rural highways in New Mexico, advantages and disadvantages of consolidation of rural schools in Indiana, making town reports more readable and more revealing of the affairs of town government in Vermont, and many similar projects. In some States training schools on the functioning of local government are held for officials and farm leaders to consider tax problems and services rendered.

### **SOLVING HOME AND COMMUNITY PROBLEMS**

During the past few years many farm families have become conscious of the need for improving their housing. Surveys and census reports show that farm housing is poor in many sections of the Nation. However, many existing farmhouses are well constructed and made livable and efficient by relatively minor changes in arrangement and the installation of modern equipment and storage facilities.

In 1951 there was a decline in new farmhouse construction, because of high building costs, shortages of some materials, and credit restrictions. However, requests to the Extension Service for help with remodeling increased slightly. During the year extension agents and specialists helped 118,000 families with remodeling problems as against 117,000 in 1950. They also helped over 44,000 families to install sewage systems, 49,000 to install water systems, and 237,000 to provide needed storage space. Extension workers responded to more than 48,000 requests for assistance with new house construction.

Extension work in housing is difficult because of the many individual problems encountered. Extension workers are, therefore, continually on the lookout for more effective ways of helping large numbers of families. North Carolina has been making successful use of the result-demonstration method. Workers have assisted 33 selected families in planning new or remodeled houses. During the year, 11 new and 3 remodeled houses were completed, and 4 of these were opened to the public. Attractive leaflets describing these houses were prepared and distributed. Several other States also have used this method to advantage.

Illinois has been conducting meetings known as the Housing Series for 6 years. During the past year 14 counties requested these meetings. In addition, to meet requests for personal guidance, workers

held six "house planning circles" in which individual guidance was given to groups of people without consuming excessive amounts of the specialists' time.

Many States have State committees on rural housing that function very effectively. In Florida, the State rural-housing committee is composed of representatives of the State department of education, State board of health, as well as the State representatives of the Farmers Home Administration, Rural Electrification Administration, and the Extension Service. Through this committee, demonstration counties have been selected and intensive programs undertaken through county committees.

### **Home Furnishings**

Making their houses more attractive and livable is a goal of many farm families. Extension workers assisted these families to obtain better lighting as electricity spread into rural areas. More than 285,000 families improved one or more rooms in their homes, and nearly 489,000 were given assistance by extension workers in the selection, construction, and care of furnishings. Choosing and making draperies and lamp shades, making and selecting rugs, and sanding and refinishing floors were among the subjects covered. Care of floors and selection of furnishings for such places as churches, parsonages, and county extension offices received attention.

In Oregon, 923 pieces of furniture were repaired at a saving of \$9,719 in workshops in reupholstery, slip covering, and refinishing of furniture. New York used television to teach the subject "What's new in home furnishings, color and design, pictures, and room arrangement." Throughout the Nation 501,000 families reported that they had improved home furnishings with Extension's help.

### **Kitchens, Storage, and Equipment**

More than 212,000 kitchens were improved by a better arrangement of work areas, adoption of efficient work methods, and the addition of equipment. Foreign visitors, in commenting on ideas they wish to take back to their homelands, always speak of the efficient, attractive American kitchens, where all family members work together. South Dakota surveyed 98 farm families that had purchased the U-shaped step-saving kitchen plans. One-third of the families reported that they had made use of the plan in remodeling and had found it excellent.

Revolving wall cabinets proved to be a popular feature. Families helped by extension representatives passed on the suggestions received to neighbors, who came in to see the improved kitchens and then went home to put them into practice in their own kitchens.

Specialists helped in training agents by organizing tours to local stores, and taught methods of "making dishwashing easy with or without mechanical dishwashers."

The cardiac kitchen developed by the Heart Association focused attention on many work-simplification ideas that the physically able could also use. Extension staffs in eight States helped to develop and man such exhibits. The ideas have spread to many other areas.



Storage space is a problem in many homes because it has not been properly planned. Showing people how to provide for their space needs with the space they have available has been an important project of extension workers. Visual aids have been used to explain space-arrangement ideas.

In Richland, Wash., a small city housing workers for a plutonium plant, the houses did not have adequate storage facilities. Pictures were taken on how to improve these facilities and were used at community meetings and in local and national publicity. Husbands cooperated in making improved installations.

Freezers were the most discussed piece of household equipment. Extension workers, relying heavily on research findings, provided the answers to a multitude of questions that arose.

In selection and use of electrical equipment and lighting, assistance was given to more than 333,000 families.

The work of young people was of tremendous help in improving homes. Extension workers in New York used an exhibit of a teenager's room reflecting the current trend toward multiple use of rooms. Included in the display were a bedroom-sitting-room arrangement, a dining-room chair remodeled and laced with twine, and a lamp made from a drain tile.

More than 178,000 4-H Club boys and girls carried room-improvement projects. They improved 114,000 rooms and made 430,000 articles. A movie, *The Fifth H*, telling the story of 4-H activities in room improvement is being shown throughout the United States. It is aiding in increasing enrollment in the program.

Instruction in the saving of labor by the improvement of farm buildings and their equipment, methods of conserving feed, and the efficient housing of livestock has contributed substantially to the 50-percent increase in individual output of farm workers in the past 15 years. In 1951, county extension agents assisted farm families in 2,600 counties in constructing and remodeling farm buildings economically to meet changing farm requirements. These families were provided with building plans, and advice and information in connection with the building of 90,000 new farm structures, as well as the remodeling and repair of a greater number. More than 2,000 counties reported that they had received assistance from extension agents in the selection or construction of equipment for farm buildings.

### Landscaping

Extension specialists in landscaping are now receiving more requests for assistance than they can comply with and they are helping to solve this problem by training local leaders for this work. In Arkansas, the extension landscape specialists completed during the year 143 landscape plans for farm families and 63 plans for public and community projects. For the 2-year period 1950-51, he prepared 521 plans. In 1951 local leaders in the State helped more than 17,000 families make landscape improvements of one kind or another. In the home demonstration clubs of Arkansas there were more than 2,000 landscape or home-grounds leaders. Each of these was supplied with materials, including publications, to help them conduct meetings.



As a result of demonstrations given by the landscape specialist, by home demonstration and county agents and by leaders trained by them, home demonstration club women in Johnston County, N. C., reported the following results: 50 families repaired their houses, buildings, and fences; 42 painted their houses, buildings, and fences; 99 cleaned their yards of rubbish and stumps; 27 made walks and drives neat and serviceable; 30 repaired or built new mail-box supports; 35 graded and smoothed yards; 28 planted grass; 48 planted evergreen trees and shrubs or vines to screen unattractive views; 161 planted shrubs, trees, and flowers along boundaries of yards; and still others reported the making of similar improvements.

In several States, specialists cooperated with State nurserymen's associations in promoting better landscaping of private and public buildings by selecting a single town as a demonstration. On April 14, designated as Plant America Day, the residents of Stow, Mass., planted trees, shrubs, and evergreens around three churches, two schools, the town hall, the library, two parsonages, and the cemetery. Numerous private properties also were planted. In Connecticut the town of Granby was selected for a similar demonstration, and 20 public buildings were listed for landscaping.

Although there is no accurate way of telling how many people are reached in extension landscape work, one State specialist estimated that he made about 35½ million informational contacts during the year. Figuring high in these contacts were 52 radio programs, with an estimated listening audience of 40,000 for each program, and 52 newspaper articles, supplied to 36 papers with a combined circulation of nearly 383,000.

### **Parent and Family-Life Education**

Parent and family-life education is an important part of Extension's program to improve the rural home. It helps families to meet the tension and problems of American life that tend to disrupt human relations and to make "growing up" difficult for children. In the past few years increased research has provided scientific information on the causes, prevention, and correction of human difficulties. This has been interpreted and made available for State and county extension workers and local leaders by the Federal and 28 State family-life specialists.

The Midcentury White House Conference on Children and Youth, and the Extension conference that followed, stepped up the work in this field. Special attention was given to work with 4-H Club members and members of clubs for young men and women.

For 4-H Clubs, specialists have prepared material for younger members dealing with personality development and better human relations within the family, the school, and the play group. For senior clubs, the programs are planned to help young people in boy-girl relationships and in their family relationships. In the YMW clubs, programs deal with choice of vocation, marriage partners, and a better understanding of human relations.

Over 23,000 4-H Club boys and girls conducted child-care projects during the year. In Alabama 57 counties reported that 4-H Club girls helped care for more than 15,000 small children. Suggestions were given to the 4-H boys and girls on teaching their younger brothers and sisters to care for their toys, to share their playthings with other



children, and learn how to get along with other children. Some phase of child care and personality development was discussed at each 4-H Club meeting.

Massachusetts has found that instruction in child care fits very well into community-service activities. In Dukes County a child-care center was set up at the 4-H fair. Young children were left with club members when their parents came to the fair. Other activities included storytelling hours at local libraries; the making of scrapbooks, layettes, and toys for hospitals and other service groups; and parties for small children.

Personality improvement is a subject that is catching the interest of older club members. Several States now have specific projects in this field.

In Wisconsin, child-care projects were used to prepare club members to help in the community as baby sitters. Three meetings on baby-sitting held in Kinoshka for the eastern area 4-H'ers were attended by 42 members. Interest in these meetings was so pronounced that similar meetings were held in the western area. Because the sessions were held during school-activity hour, it was not expected that attendance would be large. However, 82 young people, including 26 boys, showed up. Only two girls indicated they did not do baby-sitting. Because of the interest shown, one of the high-school principals asked the extension specialist to work with the faculty in setting up a short course to be given as a part of some freshman and sophomore course so that each student could receive the training as a regular activity.

The family approach has been emphasized, and "whole family" meetings have been held at which groups of families considered the problems of family life. In Alabama, a home-demonstration club chose its August picnic meeting, attended by husbands as well as wives, as the time to present a demonstration on the small child and his parents. The fathers showed great interest in the program. Members of another club, in Montana, voted, after the completion of a family-life program, to invite their husbands to all meetings that concerned both men and women. In the same State, 21 radio scripts and tapes dealing exclusively with family-life education were prepared, and 76 broadcasts on the subject were given in 17 counties. The family-life specialist in Texas also relied heavily on radio, giving 24 programs during the year. Copies of the programs were made available to county extension agents.

The number of older men and women in rural areas is increasing. Extension is helping people to prepare for their later years and is encouraging older people to study their potentialities and adjustment problems. Many home-demonstration-club members in Wisconsin were taught to develop new interests, such as concerts, textile painting, 4-H leadership, Red Cross work, community volunteer services (cancer and polio drives), and square dancing. In Marshall County, Iowa, the topic *Your Best Foot Forward in Middle Age* was presented to interested groups of women in the various townships. Keeping physically fit, mentally alert, emotionally poised, and community-minded in middle years were four points emphasized. The value of early medical examinations as a method of controlling cancer was stressed. The county home-demonstration agent reports that regular



medical examinations now are generally accepted as a must, especially among middle-aged and older women.

In Greene County, Iowa, a nursery room has been furnished at a local church, to which those attending home-demonstration meetings can bring their young children to be taken care of in the nursery room by 4-H Club girls. As an exchange courtesy, the mothers serve lunch at the annual 4-H achievement day.

The number of men, women, boys, and girls who participated in family life and child-development work has been increasing rapidly during the last few years. In 1951 there was a total of 333,000 adults; and 23,000 4-H members. The adults who attended were the parents of a total of 544,000 children.

### Clothing

Like nearly everything else, the field of clothing is a much more complex field today than ever before. Hundreds of special finishes are now used on fabrics, and many new man-made fibers are being introduced in all kinds of apparel. As a result, demand for information on the selection and care of fabrics is increasing.

More than 1,169,000 families turned to the Extension Service during the year for help with clothing-construction problems, and nearly 947,000 families received advice from extension agents and specialists on selection of clothing.

A new record was set in 4-H clothing work. Over 2,299,000 garments were made or repaired by the 642,000 members enrolled. Stories of achievement indicated that these members made an earnest effort to acquire the skills and knowledge necessary for the selection, construction, and care of clothing suitable for various occasions. A California girl, who has made 84 garments and remodeled 14 others in 9 years of 4-H Club work, says "I love to sew! To me it is a game. First you put pieces together (jigsaw), then you play follow the leader with a needle."

Retailers face many of the same problems that their customers do in trying to learn how unfamiliar fabrics will perform. Close contact with stores is important to home-demonstration agents in keeping abreast of new developments.

In Maine, each home agent made preliminary visits to stores in her shopping area and then held a series of all-day community meetings with homemakers. In New Jersey, home agents got together in a workshop and experimented with the handling of new fabrics, obtained in advance from retailers and manufacturers. Homemakers and retailers in a county selected as a pilot county held meetings to discuss their buying problems.

The California Extension Service arranged for a conference and tour on the marketing of clothing at Los Angeles and the University of California campus at Westwood, for the home-demonstration agents in that area; and a second at San Francisco and the University of California campus at Berkeley for the agents in the northern half of the State. The conference tours gave the agents background information about textiles appearing on the market, problems relating to their care, and the reasons for different price lines in ready-made clothing. Such training enabled agents to answer the widely varying questions brought to them every day by homemakers.



The preschool-child population has recently been at an all-time high. For this reason, special attention was given in 1951 to instruction on children's clothes. In Michigan the program began with workshops for making children's cotton garments. A preliminary meeting was held to discuss fabrics, designs, and the sizing of children's patterns. This was followed by 3 all-day work meetings. During the year 38 workshops were held in which 357 women were enrolled.

In one Illinois county alone, 153 women made more than 1,200 new garments for children during the year. Reports on such projects read like a ready-to-wear inventory—"6 blouses for May; 4 dresses, 3 slips, 4 pairs of panties for Susie; 4 shirts for Junior." Again, home demonstration agents met with local leaders in advance to obtain their advice on fabrics, textures, colors, and styles suitable for children. The resulting step-by-step procedure was so successful in teaching mothers to sew that it was copied in other counties and a film strip showing one of the leaders demonstrating the steps was made by the United States Department of Agriculture.

### **Foods and Nutrition**

The strength of a nation lies in the good health of its people. And proper and adequate food is basic to good health. These facts are the basis of Extension's work in foods and nutrition. The general objectives are to help families understand the relation of food to health, to teach good food habits and the selection of food for an adequate diet. More specific objectives are to help the homemaker and the 4-H Club girl especially to develop skill in food preparation and in serving meals that are attractive as well as nutritious; to understand and apply the principles of meal planning, and realize the importance of happy mealtime; to make the best possible use of home-produced food; to learn to buy food wisely; and to store food in the home according to the best methods.

A million and a half families relied on Extension in 1951 for help in improving diets, producing a home food supply, preserving food, and preparing food attractively. Assisting in the program were more than 125,000 voluntary local leaders who demonstrated how to prepare and to plan meals, how to buy better food, and how to preserve food by canning and freezing.

Planning the diet to meet the needs of all members of the family is a problem of special interest to homemakers. Another is feeding the preschool child, and yet another is feeding the increasing number of older people. There are 11 million persons past 65 years of age in the United States today. Overweight is also one of the most serious nutritional problems. The relationship of overweight to chronic disease is becoming increasingly clear.

Poor diets on the farm are a curious paradox, since the farm's major function is to produce food. The relation of home food production to good diets has been shown again and again. In a study made in Groton Township, N. Y., the nutritive value of family diets increased markedly as the dollar value of home-produced food increased, whether family income increased at the same time or not. Among Minnesota farm families the quality of diet was directly related to the



value of food they had raised in 1949. Of those who raised over \$200 worth of food, the proportion whose diets provided recommended amounts of calcium, vitamin A, and ascorbic acid was half again as high as among those with home-produced food valued at less than \$100. The average expense for food of these two groups was the same.

Data from a study in several Southern States indicate that farm families use very little milk when they do not produce it on the farm. Over 40 percent of the families in the cotton and tobacco areas studied used none or less than 1 cupful a day per person.

In the South, fall and winter gardens have received much emphasis in recent years, as a result of extension efforts in this field.

The freezing of foods is being stressed in the study of food preservation. In the United States today, about 3 million home freezers and 11,400 locker plants serve an average of 500 families each. During the year Extension helped about 950,000 families in preparing foods for freezing. This was an increase of 100,000 over the number of families in 1950.

An important phase of the foods and nutrition program in many States is teaching homemakers how to save time and effort in the preparation of meals. Use of one-dish meals, oven meals, broiler meals, and the making of ready mixes for baking all are emphasized. Better and easier ways of preparing food are constantly stressed.

Several States have separate 4-H Club projects in foods and nutrition for adolescent and preadolescent girls. Some projects also are designed to help boys learn more about foods and nutrition. Last year more than 750,000 club members carried projects in food preservation and preparation and about 13 million meals were planned and served by club members. About 8 million quarts of food were canned according to recommended practices. This decrease in canning was offset by a 50-percent increase in food preservation by freezing. In all, nearly 21½ million quarts of food were frozen either in new deep freezers at home or in well-equipped freezer lockers in the local community. Impetus was given to this method of preserving food through 4-H team demonstrations in many States.

### Efficiency in the Home

“Man may work from sun to sun, but woman’s work is never done.” Many homemakers are finding, however, that they can take much of the drudgery from household tasks by using their minds and bodies efficiently and by choosing their tools wisely. Better management of time and energy results in happier homes. But changes in attitudes often are necessary before homemakers can be taught to develop new skills and better methods.

During the year, Extension helped nearly 615,000 families to improve their housekeeping methods and 318,000 to solve time-management problems.

Some 100,000 4-H Club boys and girls were taught simpler ways of washing dishes, making beds, helping their parents with other chores, and caring for pets.

Laundering still is the most disliked task homemakers perform. Extension agents taught how equipment could be arranged to save steps, how to simplify ironing, and how to choose and use new detergents.



"Cleaners sure have changed, and I haven't changed my methods accordingly," commented one homemaker in Indiana after a meeting at which the labels from soap and detergent boxes were studied and the information was analyzed. Altogether, Extension helped 101,000 families in improving their laundry arrangements and 273,000 in buying household supplies.

Special publications were distributed in many States to assist homemakers in solving their time-management problems. Since 1944 New Jersey has taught homemakers a four-step method of improving any household task, and more than 1,000 women have improved some task. They assert that learning principles that can apply to all their work is of greater importance than the actual steps or time saved in improving one job.

Food preparation lends itself readily to work simplification, as do laundering and cleaning. Many young mothers have been able to improve tasks related to the care of children.

Far too many fatal accidents occur in the farm home. Through discussions, radio broadcasts, news articles, exhibits, and in other ways, extension agents have devoted much time to teaching how to prevent accidents in the use of caustics, drugs, and paints; accidents caused by careless housekeeping; accidents connected with handling of electrical and gas equipment; and other types of mishap.

Homemakers did not limit their activities to home safety, but also studied how to drive safely, and to cooperate with highway patrol officers.

The defense program stimulated interest in home care of the sick and first aid. Some 232,000 families received training in these subjects, and more than 742,000 families removed fire and accident hazards. Five hundred and ninety-three thousand 4-H Club boys and girls received training in fire and accident prevention.

### **Home Business Affairs**

"The men folks should have been here too," was a comment heard over and over from Kansas home demonstration club members after meetings at which home business affairs were discussed. The theme of the meetings was that today's homemaker has many more "tools" to help her with her business affairs than did her grandmother. These tools include a budget, a household record of income and expense, the household inventory, the net-worth statement, and insurance and investment records, to mention a few. A follow-up spot check in one county showed that, out of 303 families, 27 percent made out a money budget, 1 in 3 kept a record of household expenditures, 1 in 5 made out an inventory, and 35 families made out a net-worth statement.

How to give young folks an opportunity to learn through experience to make their own decisions and to handle money was a topic investigated by parents. There were 357,000 4-H Club boys and girls who kept and used personal accounts as one tool with which to help achieve greater satisfaction from the money they had to spend.

Extension, in cooperation with the United States Department of the Treasury, bankers, and businessmen, developed and conducted thrift programs with 4-H Club members. Nebraska received national recognition for the literature it prepared.



Some of the most popular family-economics discussions have been on descent of property and the legal rights of women. In Michigan, 22,000 women in the State have studied during the past 3 years about the legal rights of women. One farm woman learned that she was not adequately protected by law. After she learned that wills, joint deeds, and joint titles are the best protection in case of death, she talked with her husband about a will. He could not see the value of it. After all, they rented the 160 acres they worked. What did he have to will to anyone? Then one day he read that 40 to 50 percent of the average families in the country were worth \$10,000. He didn't believe it—the figure seemed fantastic in his case. But the statement aroused his curiosity! So he wrote down the value of his livestock, tools, equipment, automobile, and other personal property. According to his own figures, he had a net worth of more than \$10,000. That decided it! If he was worth that much, it was time his wife should be assured that what they owned would be hers in case of his death. This couple now has a will, drawn up by a local lawyer, that gives the wife adequate protection.

Such programs resulted in 170,000 families' reporting that they had received help in financial planning; 109,000 in home accounts; and 644,000 in the use of timely economic information in making family decisions and adjustments. Bankers in rural areas cooperated with the Extension Service in helping women learn how to manage their business affairs.

Another method that is finding wide acceptance by farm people is Extension's help in management. It is called balanced farming or, as in Kentucky, the farm-and-home development program. This activity aims at giving people help with the process of planning. Field days to see how one family manages its resources on the farm and in the home have been highly successful. A Kentucky study reports that cooperating families said they liked the definite information, the inspiration it gave for higher standards, the bringing together of family members in one program, and the association with other families. Families cooperating in this program in 1951 totaled more than 58,000.

### **Improving Rural Health**

Extension staffs in all States carried on programs last year that contributed to the good health of rural people, and specialized work was done in 25 States that have extension workers assigned to health education. The greatest attention was given to encouraging people to obtain periodic physical check-ups; helping communities to study and meet health needs, including the getting of doctors and hospitals or health centers; and teaching or providing information about home safety, home nursing, preventive practices for family-health protection; and prepayment or health-insurance plans. Educational work in nutrition with special emphasis on weight control also contributed to health, and extension recreation and family-life programs contributed to mental health.

During the last 3 or 4 years State and county extension staffs have helped rural people to obtain more than 500 new rural hospitals; to form more than 300 county or community health councils whereby



people might study and work on local health problems; and to have more than 305,000 4-H Club boys and girls receive annual physical check-ups and health instruction for the development of good health habits and attitudes. Home demonstration and 4-H Clubs conducted various community health programs or discussed health problems at club meetings. In Puerto Rico thousands of families were aided in home sanitation and hookworm prevention.

County extension agents reported that in 1951 they taught or assisted 232,000 families in first aid and home nursing, 493,000 families in immunization and preventive measures to promote health, and helped with nearly 2,700 nutrition or health clinics. More than 200,000 boys and girls in 4-H Clubs completed projects in health, home nursing, or first aid, and 593,000 received training in fire and accident prevention as part of their club work. A 4-H Club in Jackson County, Ga., reported 100-percent participation in health projects. Practical goals were set and many were reached. In Illinois, 42 health-activity field days were conducted.

### **Recreation and Community Improvement**

Better farming and homemaking are not the sole objectives of extension work. People like to have good communities in which to live. In all States, various extension activities contribute to community improvement, and in 1951 specialized work was done in about 30 States that have extension specialists in recreation, community organization, and rural sociology.

As a result of this work, hundreds of communities throughout the country have new community houses, libraries, recreation facilities or programs, improved roads, stronger rural leadership, better organizations and meetings, and more wholesome town-country relations and community life.

Greater emphasis is being given to helping people to get together locally to study community needs and do things for themselves through county or community councils, improvement associations, planning bodies, and other forms of cooperative effort. One Iowa town of about 300 population is a good example. Through efforts of its new planning board it procured a doctor, set up a garbage-disposal system, had a clean-up campaign, built a memorial playground, and improved the street and sidewalk leading to the schoolhouse.

Organized community-wide improvement associations or clubs are springing up all through the Southern States. In other States community councils have been formed in many places to give leadership to better farming and community life.

In Indiana, Kentucky, Ohio, Pennsylvania, and other States, county or district extension leadership schools or institutes were held, devoted to study of community problems, to the training of officers of local organizations to be good leaders, to the learning of recreation techniques, and to helping organizations to improve their meetings. Short courses for rural pastors were held at the agricultural colleges of 20 or more States.

More than 47,500 4-H Clubs engaged in community activities such as improving public grounds, conducting local fairs, building com-



munity playgrounds, and, during emergencies, helping neighboring farmers with farm chores. In Missouri, 781 clubs conducted a wide variety of community-service activities. Two 4-H Clubs in Daviess County and one in Jackson County collected food and clothing for flood victims. 4-H girls in another Missouri club packed and sent 70 quarts of canned food to an orphanage during the holidays. Outstanding service was also performed by the 486,000 boys and girls, who demonstrated improved farming and homemaking practices at meetings held for parents, neighbors, and others in their communities. Nearly 357,000 club members reported the keeping of personal accounts as part of their club work.

Recreation programs have become more and more prominent in extension work. Many States have recreation training institutes for local leaders. Last year 252,000 4-H Club boys and girls received training in recreation leadership and 258,000 received training in music appreciation. New frontiers were explored with development of State-wide share-the-fun festivals as part of the national 4-H recreation and rural-arts program. More than 26,000 persons attended county talent programs held in 45 Michigan counties. The 7,500 4-H camps held during the year, attended by 314,000 members and leaders, provided still another means of promoting information and inspiration, as well as desirable attitudes and skills that make for outstanding citizenship and for home and community improvement. County extension agents in 2,500 counties reported that they aided 704,000 families with home recreation and helped 34,000 communities with improving community recreation facilities.

Adequate library facilities do not exist in many counties and rural communities. In 1951, extension agents assisted more than 7,200 communities in 932 counties in providing good books and magazines for reading by rural families. In counties and isolated communities that have been without any type of library service, home demonstration councils and clubs have established small libraries or book collections. In a sparsely populated county in Wyoming a community library has been sponsored and operated by the same home demonstration club for 20 years. In Arizona three library kits from the university library are circulated in isolated communities. In Kentucky, home demonstration groups have assisted in establishing 44 county libraries and 101 club libraries. The county libraries usually are started by each club's donating at least one book each year to the library. During the year 753 new books were added to club libraries and nearly 4,600 to county libraries in the State.

The New Mexico Association of Extension Clubs volunteered to rebuild the New Mexico Boys' Ranch library when it burned down. (The ranch is a home for underprivileged boys.) During the year \$500 was raised and 576 books were donated.

Nebraska, with a long-established reading program, is now emphasizing children's books. In several States, including North Carolina and South Carolina, certificates are awarded to home demonstration club members who read a prescribed number of recommended books during the year. About 4,000 such certificates are awarded each year in North Carolina.



## GROWTH OF HOME DEMONSTRATION WORK

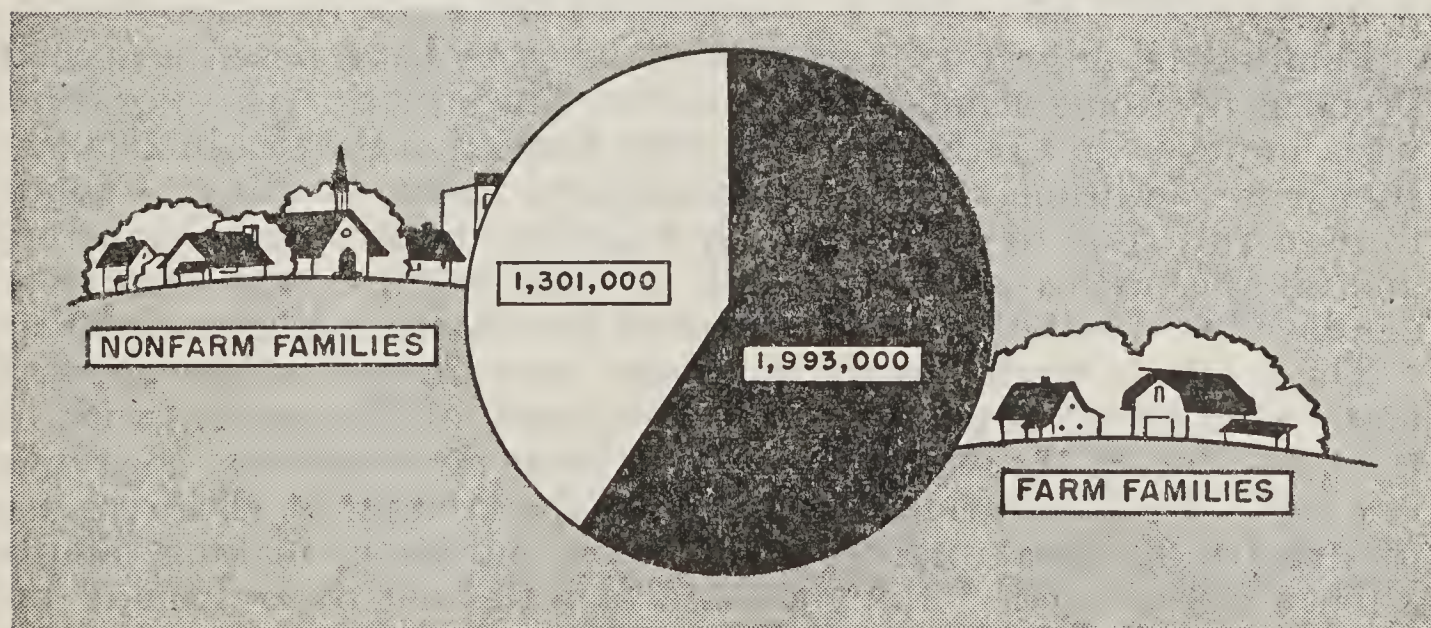
Home demonstration work continues to grow—in both scope and numbers. Its origins rooted in such simple matters as tomato canning and other everyday household chores, the program today covers a broad field involving not only all phases of homemaking but also community activities, cultural interests, public affairs, understanding of international relations and world peace. Through training and experience in group action, rural women have developed effective leadership, and they are able to plan and speak for themselves in the interest of their families, homes, and communities.

Along with this growth in scope there has been a corresponding increase in the membership of the Nation's home demonstration clubs. In 1951 the enrollment in nearly 63,000 clubs reached an all-time high of 1,423,000. Nearly 3,300,000 families—about 60 percent of whom were farm families—changed home practices as a result of the program.

Homemaking with its many demands and interests is a business in itself, and the farm home is an important factor in the farm business as well. Farm and ranch women—and urban homemakers, too—need information, training, and encouragement in making dollars go a long way by wise buying and thrift in the home, in keeping their families well through proper nutrition and health habits, in saving their own time and energy by efficient management and work methods, in making the home comfortable and attractive, and, most important, in caring for children intelligently and raising them to become respected and useful citizens.

Home is the place where the entire family assembles at nightfall, and it remains largely the responsibility of the mother to keep the home a comfortable and happy place. All this takes knowledge, constant thought, and work on the part of the whole family, but especially on the part of the mother. Homemakers welcome the practical kind of education that home demonstration work offers. Guided by nearly 3,700 county home demonstration agents and assistants, more than

### ADOPTION OF HOME PRACTICES



Sixty percent of the families improving their home practices through extension efforts during the year were farm families.



200 State and district supervisors, and 300 home-economics specialists, home demonstration work holds a highly recognized place in the adult-education field in this country.

### **Spread to Urban Areas**

The number of nonfarm rural homes and urban homes requesting assistance from home demonstration agents is increasing each year. Of the 3,300,000 families changing home practices in 1951 as a result of home demonstration work, 1,301,000, or 39 percent, were nonfarm families. All States conducted home demonstration programs with rural nonfarm families and families living in towns of less than 2,500 population. At least 26 States reported a significant amount of home demonstration work in larger cities and towns.

In general, the urban homemaker wants the same type of information that the rural homemaker does. This includes food preservation by freezing and canning, food preparation and nutrition, clothing construction and remodeling, house furnishings, home management, consumer education, health and safety, child care, family relationships, landscaping of home and public grounds, and other family and home interests.

In New York, urban extension work is aided by a State appropriation granted to counties where there is an urban population of 25,000 or more and where county extension appropriations are at least \$8,500. In 1947 the Oregon State Legislature passed an act permitting city councils to appropriate funds for extension work in cities of more than 10,000 population. In 1949 the State of Washington enacted legislation that makes urban extension work possible in any county.

The States that have one or more special urban home demonstration agents employed to work in large cities are Colorado, Louisiana, Maryland, Michigan, New Hampshire, New Jersey, New York, and Rhode Island. In addition, a new service in consumer education under the Agricultural Marketing Act of 1946 is proving especially helpful to urban homemakers.

### **Helping Families of Agricultural Laborers**

Families of migratory agricultural laborers have posed a special problem for home demonstration work. The situation is being dealt with, however, in California, where the Extension Service in 1950 assigned an additional home demonstration agent to Kings County to give full time to working with families of agricultural laborers and families with very low incomes. In 1952 two agents-at-large were employed to do similar work in several San Joaquin Valley counties.

These agents work largely in fringe communities or in camps of many families on large ranches. Since many of the women work in the fields during the day, some evening home demonstration meetings are held. Demonstrations are given on the feeding of children, use of dried milk, meal planning for better nutrition, making simple kitchen-storage and clothing-storage facilities out of crates and inexpensive materials for small living quarters, clothing construction, and other practical subjects.

In some of the camps the women set up exhibits of home practices for other women in the camp to see. Owners of the ranches have pro-



vided centers for meetings, and in one place a community center accommodating a good-sized audience has been built.

The home demonstration agents cooperate with public-health nurses in their work in the camps. On one ranch the agent cooperated with the department of public schools in establishing a nursery school with a trained teacher in charge.

### **Emergencies and National Security**

When floods hit Kansas and Missouri in 1951, home demonstration groups immediately went to work. They gave assistance in the emergency feeding of several thousand in the flooded areas over a period of about a month. Agents and local leaders acted as canteen managers in some places. While the waters were still high, radio was used to broadcast information on care of canned and frozen foods. Instructions in gardening to be followed as soon as the soil had dried out were broadcast by agricultural agents.

Home demonstration agents and local leaders gave invaluable assistance to the Red Cross in collecting food, clothing, and bedding for unfortunate families. One agent made 14 home calls to help determine how the home demonstration groups could help. Under the Flood Rehabilitation Act, emergency home agents were appointed in 14 counties. They listed needs, advised emergency organizations of these needs, distributed extension circulars giving information of immediate use, conducted workshops on the repair of furniture and renovation of furnishings, and assisted in reviving 4-H Club projects that had been set back by the floods.

Many activities in the home demonstration program contribute to national security. In virtually all States, home demonstration groups have been active over a period of years in United States bond drives and in promoting blood-bank activities. New Mexico club members serve as chairman in the blood-typing and blood-bank programs. In Nebraska the typing of blood of each member of the family is being encouraged.

Thousands of home demonstration club members have taken courses in first aid and home nursing. In North Carolina, 450 rural women received Red Cross nursing certificates in 1951. In Alaska groups of homemakers received instructions in home nursing and emergency feeding. Some New York county groups made surveys to determine what housing would be available in case of enemy air attacks. Wisconsin discussion groups considered such defense problems as continued increased agricultural production, shortage of man and woman power, and inflation. In Florida, 27 civil-defense chairmen in home demonstration councils assisted in the civil-defense program under way in most communities.

The training that home demonstration club members and 4-H Club girls get in foods and nutrition helps them to be effective in meeting emergencies in mass feeding. Home demonstration clubs in New Hampshire have urged all families to preserve or store enough food to take care of at least one extra person in the home. Rural women have been urged to store extra supplies of staple foods and canned goods. Home demonstration groups in Maine are cooperating with civil-defense authorities in a project in feeding many in an emergency.



Feeding stations are mapped in communities, simple emergency meals are planned, and those responsible have been trained in preparing and serving large numbers of people.

### **Citizenship and Public Problems**

"Home is the center of a woman's life, not its circumference." This slogan of Illinois farm women might well be considered the slogan of home demonstration groups everywhere that want to learn more about public affairs and to fulfill intelligently their responsibilities as citizens. Forums and discussions on good citizenship and public affairs have been conducted, on a nonpartisan basis, by home-demonstration groups in most States. Points emphasized include studying the qualifications of political candidates, keeping informed on legislation that affects the home, being willing to accept office, voting in all elections, studying how to deal with inflation, and conserving the natural resources of the country.

In Nebraska informative leaflets were used by 143 home-extension clubs in discussing such topics as Citizenship and Your Government, Becoming a Better Leader in Your Community, and You Owe the Land a Living. Some home demonstration clubs work toward 100-percent membership voting in all elections. Many are planning tours to the State capital. Kentucky plans citizenship programs each year at district meetings of citizenship chairmen of county home demonstration councils. These are followed by county citizenship committee meetings.

In Massachusetts it was found that at least half a million citizens did not vote in 1950. Home demonstration groups in the State are conducting educational programs dealing with the importance of being intelligent citizens and of understanding the duties and responsibilities of voting. Kansas groups discuss such questions as what is a democratic society and what is a good citizen. Colorado groups have used for discussion and study of government the test questions for the foreign-born who wish naturalization. At least 75 percent of Missouri clubs devote one meeting each year to citizenship. State training schools and institutes on citizenship for leaders were conducted last year in Illinois, Indiana, New Hampshire, New York, Ohio, and West Virginia. New York has been conducting citizenship-training conferences for 6 years and Illinois for 14 years.

United effort by home demonstration groups is fostering notable State-wide accomplishments throughout the Nation. When rural women in Oregon discovered that 22 percent of the young men in their State had been rejected for military service because of poor teeth, they became active in getting research work on the problem started by the Home Economics Department of Oregon State College. The State legislature has appropriated a total of \$55,000 for the work, which has been so successful that it is now included in the regular budget for the college, and will be until the project is completed.

In 1951, Oregon home demonstration women completed the raising of \$45,000 to build a cooperative house on the Oregon State College campus. The house, now under construction, will take care of 50 to 60 girls selected on the basis of scholarship and financial need, with preference given to 4-H girls. A similar cooperative house was opened in



1951 on the University of Arkansas campus as a result of years of effort by home demonstration club members in the State. In Georgia, home demonstration groups are assisting in the building of a permanent camp to be known as Eagle Rock.

North Carolina club women, through the Jane S. McKimmon Loan Fund, have helped 107 deserving college girls to obtain an education since 1930, and 26 girls are using the fund this year. Assets total nearly \$31,000. A similar project in Virginia has brought help to 50 4-H Club girls attending college during the past 20 years. Other States with home demonstration college scholarship funds are Arkansas, Kansas, Kentucky, Louisiana, Michigan, Mississippi, Montana, Nebraska, New York, Ohio, Oklahoma, Oregon, South Carolina, Vermont, and West Virginia.

### **Special Week Observed**

National Home Demonstration Week each year has highlighted the achievements of rural women through organized planning and action. Today's Home Builds Tomorrow's World has for several years been the theme for the week. In 1952 the theme appeared on 30,000 posters displayed throughout the country and featuring the statue, The Pioneer Woman, and the modern pioneer woman learning through home demonstration work.

Home Demonstration Week called the general public's attention to the vast educational program in the homemaking profession conducted by the Extension Service. The week also afforded an opportunity to recognize the contribution local voluntary leaders, trained by extension workers, have made in presenting practical and cultural information to a total attendance of 14 million women at meetings held during 1951.

In 1952 several local leaders and extension workers in the States of Illinois, Oregon, Vermont, and Washington broadcast over Nationwide radio programs. Two television shows of wide coverage featured salutes to home demonstration work. At least 13,000 members and agents participated in radio programs in the States. Press coverage was wider than ever before. Some 12,000 exhibits were displayed at meetings with an attendance of 560,000. At least 750 tours to improved homes and farms were conducted. Statements by governors, college presidents, extension directors and leaders called attention to the fact that democracy begins in the home and good homes are essential to a strong nation.

### **NEGRO FAMILIES MOVE FORWARD**

More than 850 Negro county agents, home demonstration agents, assistants, and supervisors were active in forwarding the extension program in 1951. They worked mostly in the Southern States where the Negro rural population is concentrated. The results of their efforts, as shown by statistics, are included in the over-all totals in this report. A few specific statements, however, may help to show how the Nation's Negro farm families are continuing to make progress.

Efforts to improve corn yields have been notably successful. Use of hybrids and adoption of improved practices have enabled hundreds of 4-H Club boys and adult farmers to earn membership in 100-bushel



corn clubs. Increases in acreage of Ladino clover-grass pasture have paved the way for expansion of livestock enterprises. Some county agents report that considerable numbers of their farmers now have sufficient acreages of improved pasture to graze substantial herds of beef animals. "Endless chain" pig projects have proved highly popular with 4-H Club members and have also resulted in the improvement of adult farmers' herds of swine. Auction sales have been used to get premium prices for the hogs sold. Fat beef cattle shows in South Carolina have been outstanding. Broiler growing is increasing in virtually all Southern States.

In Okmulgee County, Okla., 4-H Club members were graduated from annual fat-stock shows to frequent farm-to-market sales as another step toward the goal of quantity livestock production in the South. In the first sale of this kind, 15 youths took 45 hogs to the Oklahoma City stockyards where a commission firm auctioned them for nearly \$2,000. The aim of the effort is to encourage farm youths to raise not only a pig or a calf to compete for honors at annual fat-stock shows, but also to raise a number of animals to be marketed throughout the year.

Because one of his boys made good with a 4-H pig project, a South Carolina farmer is now grossing \$3,000 annually from hogs as a side line to his income from cotton and tobacco. For more than 20 years he was content to raise cotton and tobacco as his cash crops and a few hogs for home use. Then the local county agent interested one of this farmer's boys in carrying a 4-H pig project. The youngster raised a grade Duroc, which earned a prize at the State fat-stock show and sold for nearly 25 cents a pound, grossing the 4-H'er nearly \$60. That convinced the family that hogs were a good cash crop, and they immediately began to build up a quality herd. Last year they sold 79 porkers that brought more than \$3,000. This increased their total gross income to nearly \$11,000.

In Mississippi, farmers made a special effort during the year to increase cotton production to help meet the national goal. Under the supervision of county agents, 199 farmers conducted 5-acre cotton demonstrations and followed experiment-station recommendations on proper land use, fertilization, and insect control. Fourteen of this number grew more than 21½ bales of cotton per acre. Extension workers in Mississippi estimate that adoption of improved practices has enabled farmers to increase their food and feed production by at least 25 percent.

Home demonstration agents in 35 counties of Alabama conducted demonstrations on planned management of time, energy, and money. The subjects covered included buying labor-saving devices and making and remodeling household articles. Nearly 11,000 families reported adoption of improved housekeeping methods.

In Louisiana, increased use of plant food is raising the per acre yields of all crops. In addition, more and more farmers are turning to grassland and livestock farming to increase and stabilize their incomes and to conserve soil and water. Six thousand farmers are doing swine-improvement work and, with the guidance of county agents, more than 25,000 are improving their poultry.

"It is not difficult any longer to get farmers lined up with the soil conservation program," reports one extension worker. Much interest



has been stimulated through a South-wide contest that is concluded annually with recognition of winners at a jamboree held on the Georgia farm of a prominent retired Negro educator.

Throughout the South the standard of living today is much higher than it was even a few years ago. New homes, new barns, new fences, and other physical improvements partially show the extent to which Negro families are achieving a more satisfactory rural life.

It took only one rural home-improvement tour to convince a Mississippi farm family that they should build a new home and move out of the shack in which they had been living for 18 years. Even with money in the bank and a good year-round income, this family had never decided to provide themselves with a good home until shortly after they had gone on an extension home-improvement tour. When they returned to their own shabby dwelling, the memory of the dozens of comfortable homes they had seen on the tour made them very much dissatisfied with it. Within a week, they had called at the extension office and requested aid in planning a new home. The agents gave them floor plans and cut-out drawings of furniture so that the husband and wife could study various designs and furniture arrangements. Also, the agents helped them to select materials and plan with the carpenter. Four months later, the family—father, mother, and five children—moved into their attractive new home, which is equipped with new furniture, including a gas range, an electric refrigerator, metal porch furniture, and venetian blinds. By doing most of the work themselves with the guidance of a carpenter, they were able to build their six-room house for only \$2,100, which they paid in cash.

A new educational approach to the problem of improving rural housing was launched by the Negro home demonstration agents of South Carolina when they opened the Nation's first farm demonstration home. The model home, built at a cost of \$8,200, will provide first-hand experience in better rural living for the hundreds of farm families who through the years actually will have an opportunity to spend a brief vacation period in it. One young farm family in each of the 30 counties where a home demonstration agent is employed will be selected each year to spend a week in the home between fall and late spring. During the summer it will be occupied by 4-H Club girls. The attractive six-room, cement-block rambler has a living room, dining room, U-shaped kitchen, three bedrooms, including a children's room, a bathroom: front porch, screened back porch, and ample storage space. All the windows have full-length screens. The home is furnished with used furniture that has been refinished and reupholstered.

The annual regional 4-H Club camp, held in 1951 at Pine Bluff, Ark., is stimulating greater interest in the 4-H program. The delegates come from 17 States, with four boys, four girls, and two adult leaders representing each State. The program at the regional camp consists of recreation, educational tours, addresses, discussions, and talent night. The delegates preside and participate in all the assembly sessions.

Extension workers themselves are obtaining a professional standard comparable to that of other professional workers in educational



institutions. In addition to being a graduate of a land-grant college, the typical professional worker is taking advantage of in-service training. Each year a number of men and women agents take time off to enroll for technical courses in the annual summer school at Prairie View, Tex., or at some other institution. The States are giving encouragement to the professional improvement of the agents by granting leaves of absence, and, in some instances, financial assistance as well.

Some of the States are providing better offices and equipment and better salaries for workers. However, the program has not gone forward so rapidly as desired in personnel and pay for the Negro extension worker, but the quality and amount of work they perform are getting favorable response from the public. This favorable sentiment is helping to gain better financial support for the program.

### PROMOTING PEACE AND WORLD UNDERSTANDING

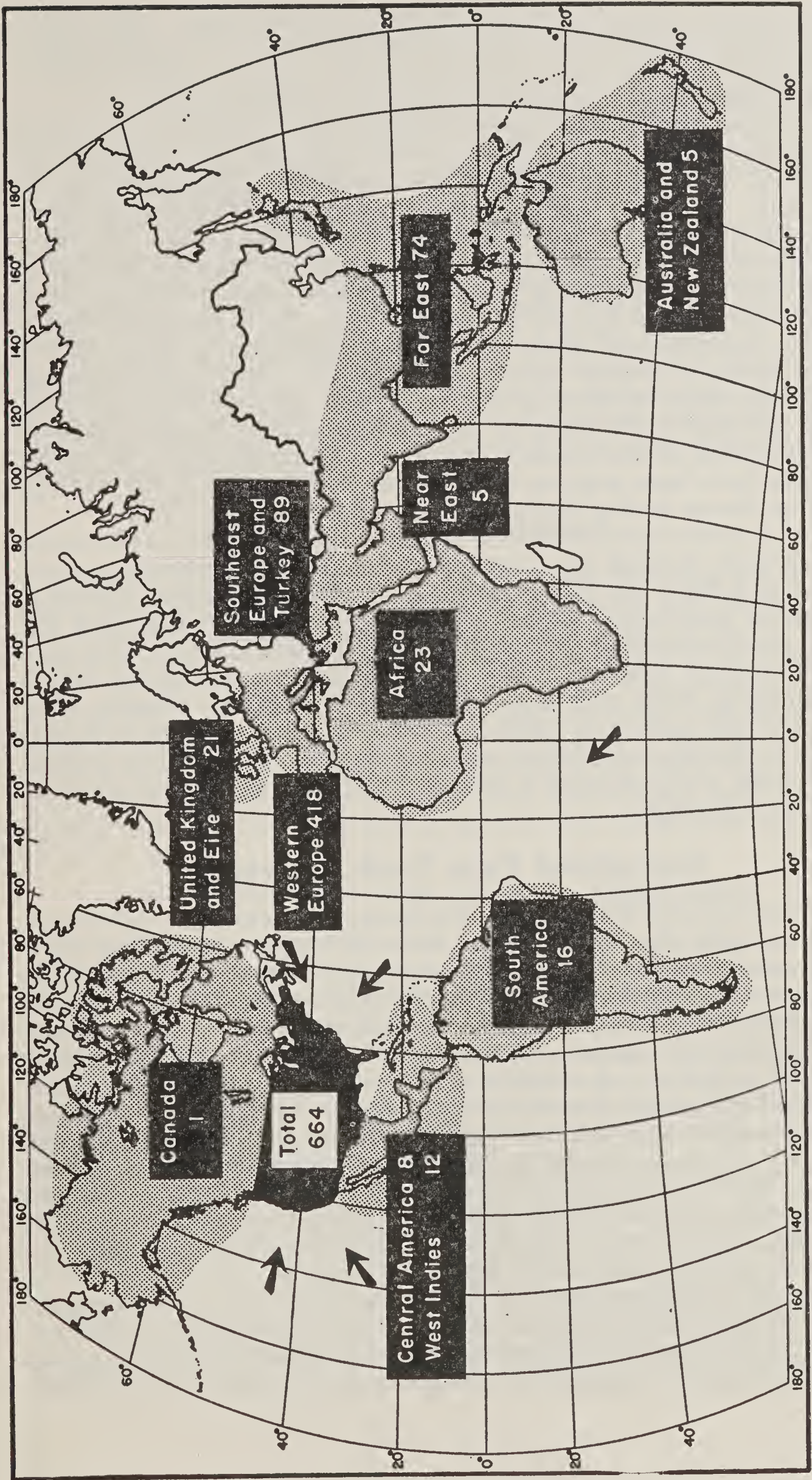
The Second World War made the world seem small. Interests of extension workers, and of the groups they serve, extend beyond the borders of the United States. As one State extension director said recently, "The thread of freedom is a big cord in our work." Freedom goes hand in hand with peace, and peace is impossible without world understanding.

This interest in promoting world understanding is reflected in extension reports in many ways. These include the many activities of home demonstration women, 4-H Club members, and the International Farm Youth Exchange. Many extension workers have left their posts to go abroad to give technical assistance to underdeveloped areas, and especially to aid in setting up agricultural extension services in countries that do not have such agencies. In addition, during the 8 years up to July 1, 1951, at least 1,522 professional workers and young farm men and women from 76 foreign countries have come to the United States to learn how extension work is conducted and to study farms and homes in rural America. The number of professional women coming is increasing each year. During the calendar year 1952, at least 1,500 administrators, supervisors, specialists, agents, and others interested in some phase of agriculture or home economics came from 65 countries and were oriented in the Extension Service, United States Department of Agriculture, and observed extension work in the States.

"We all want the same things—a nice home, a nice family, and peace," commented a home adviser from a foreign country during a visit with Kentucky farm women. Several State home demonstration councils have financed visits to the United States by home economists from foreign countries. States active in this work include Iowa, Kentucky, Louisiana, Michigan, Nebraska, North Dakota, South Dakota, Virginia, and West Virginia.

International understanding is a familiar theme in many home demonstration discussions. The United Nations organization was a program topic at 356 meetings in New Mexico in 1951, and in Kentucky 138 clubs studied the United Nations. An increasing number of home demonstration groups are observing United Nations Day with special programs. Florida reported an attendance of more than 14,000 at





The Extension Service planned programs for and gave training and information about extension education to 664 persons from 51 countries during the year ended June 30, 1952. These rural leaders from other nations included 533 men and 131 women. They came to the United States to receive such training.



special United Nations Day meetings during the year. United Nations flags are still being made by many groups, and those made earlier are being put to good use. In Pima County, Ariz., two flags made in 1950 have been used on an average of once a week ever since.

Several thousand rural women in more than a score of States are corresponding with rural women in other lands under the "letters for friendship" program sponsored by the Associated Country Women of the World. In Ohio, 2,000 homemakers have pen friends in 25 countries. In virtually all States home demonstration groups have featured the life and culture of at least one foreign country at one of their regular club meetings during the year. Oklahoma prepared a circular, *You and the World*, for use by clubs. Each club in Louisiana had a leader on international affairs and at each meeting, time was allowed for the leader to present some phase of international understanding. Each home demonstration group in Oregon gave over one meeting during the year to the study of one foreign country, and a luncheon of foods typical of that country was served. International fiestas and programs have been popular in Arkansas, Idaho, Kansas, Wyoming, and other States during National Home Demonstration Week.

Rural America has extended its inherent neighborliness to the needy in other lands through the Cooperative for American Remittances to Europe (CARE), the Christian Rural Overseas Program (CROP), and similar programs. Clubs in 8 North Carolina counties sent 303 CARE packages and 936 pounds of clothing abroad in 1951. One parish in Louisiana adopted a baby in Greece and supported the infant with clothing, food, and medical and toilet supplies. Puerto Rico clubs have sent more than 1,300 cans of foodstuffs to soldiers in Korea. Groups in Kansas contributed teaching equipment to a dental college in Indonesia and purchased a carload of dried milk for war-stricken countries in Europe.

### **International Farm Youth Exchange**

The International Farm Youth Exchange program had a significant growth in both size and scope in 1951. Forty-two exchanges were carried out in 1950, and a goal of 50 exchanges was set for 1951. This number was exceeded when additional resources were made available by an educational foundation. At the end of the project year, a total of 75 American young men and women from 34 States and Alaska had visited 28 countries. A slightly smaller number of exchangees came to the United States to live on American farms during the same period. The increase in scope of the project is indicated by the fact that 13 of the 28 countries participating in 1951 had not participated before. For the first time the project established exchanges with countries outside Europe, such as India, Lebanon, Syria, Israel, New Zealand, Australia, and a number of Central and South American countries. A special exchange was established with Puerto Rico.

Under this program, devoted to the development of international understanding, the young men and women participating live and work with farm families in their host countries for periods of 4 to 6 months. On their return it is expected that they will spread the value of their



experiences by telling their story to the people of their county and State. This phase of the project is strikingly illustrated by the following figures. An incomplete poll of the 165 United States delegates who have participated in the project since 1948, showed that they had given about 16,500 talks to more than 11½ million people. In addition, these young people, on the average, had prepared or were the subject of 47 newspaper or magazine articles and had appeared on 13 radio or television programs.

The International Farm Youth Exchange is financed largely from private sources. Though it is serviced by Government personnel, both in the United States and abroad, no United States Government funds are used for the actual exchange of these young men and women. Contributions to the project come from a great number of sources. 4-H members and members of clubs for young men and women, home demonstration groups, farm organizations, and a great variety of other groups, philanthropic foundations, business organizations, and individuals are among the contributors to this program for exchanging "grass-roots ambassadors."

### Second Open House

A second and expanded "open house" study program for 25 rural youth program leaders from 8 foreign countries was conducted by the Extension Service. Each of these leaders was given an opportunity to observe and study Extension's 4-H and YMW activities and other rural-youth programs in three States. This experience was supplemented by participation in the National 4-H Club camp, educational visits to Chicago and New York, and a special course of study at an extension summer school, during which there was an opportunity for the visitors to summarize their observations and comparatively evaluate their own youth programs with those observed in this country.

### 4-H PREPARES FOR USEFUL CITIZENSHIP

Throughout this report, mention has been made of the achievements of the more than 2 million boys and girls enrolled in the Nation's 4-H Clubs. Changing times have brought new challenges and new opportunities to 4-H. The program has been expanded to reach more young people living in urban and rural nonfarm areas. At present, 4-H work is established on a sound basis in such urban areas as Portland, Oreg., Spokane, Wash., Denver, Colo., Detroit, Mich., Indianapolis, Ind., Syracuse, N. Y., and other large towns and cities. Vermont reports that 4-H Clubs are organized in all urban areas, with emphasis on handicrafts, electricity, poultry, gardening, and all homemaking projects. There is growing demand for club work on the part of parents of young people as well as by the young people themselves. This has been due largely to the rapidly increasing interest of the general public in 4-H work and what it is doing for young people.

The 4-H Club idea is spreading around the world, and its effects are being felt in almost every nation. The International Farm Youth Exchange program is broadening the horizons and the understanding



of many thousands of young people and, through them, their elders. "Pen pal" friendships are being formed throughout the world.

More than 15,609,000 American boys and girls have shared in the benefits of 4-H Club work since its inception. The program has flourished because of the support and cooperation of many individuals and groups such as the National Committee on Boys and Girls Club Work and the National 4-H Club Foundation, both dedicated to the development of 4-H. Accomplishments of 4-H members have been brought to the public through use of press, radio, and television as well as through observance of special days, weeks, and events, including National 4-H Sunday, National 4-H Club Week, and National 4-H Achievement Week. Issuance of a special 4-H commemorative stamp by the United States Post Office Department and observance of the fiftieth anniversary of Ohio's 4-H program focused attention on the background of experience in 4-H.

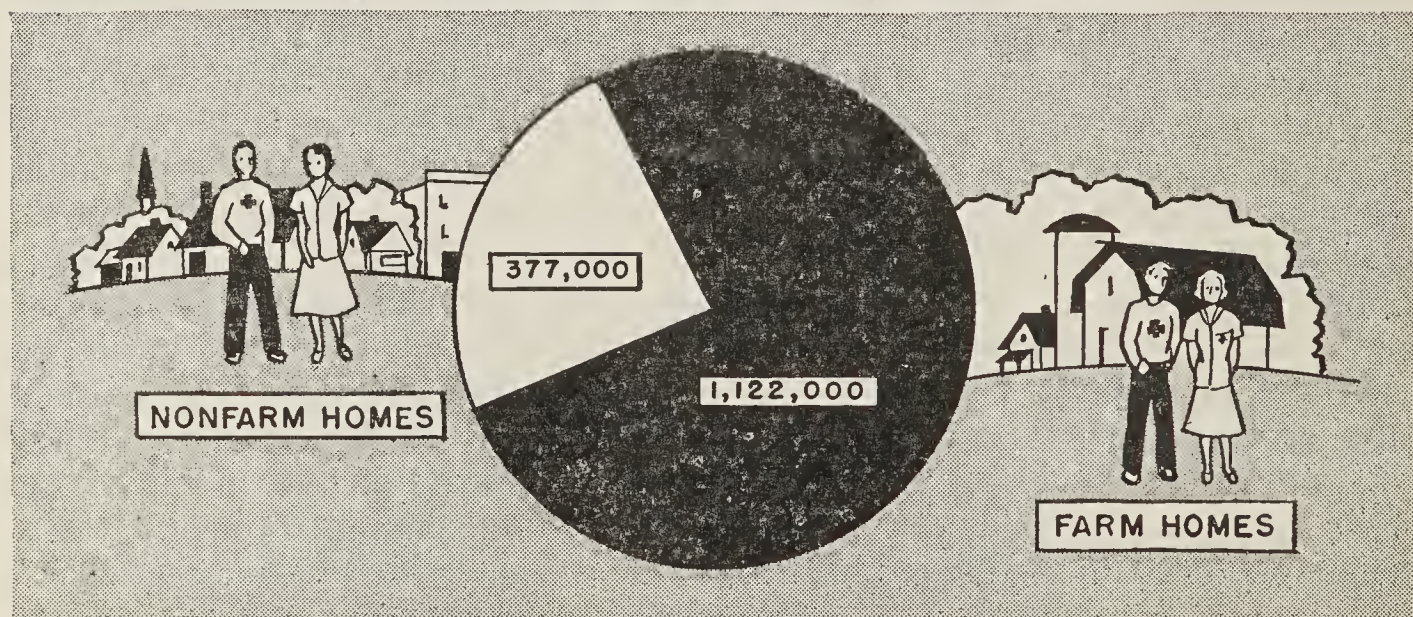
Ever alert to new challenges, 4-H will continue to play a vital role in the fourfold development of young people not only in the United States but throughout the free world.

### Work With Young Men and Women

Extension's program for rural young men and women between 18 and 30 years of age did not reach so many in 1951 as in 1950 because of the impact of defense activities on this age group in rural communities. The scope and effectiveness of the program, however, have continued to grow.

The YMW program is directed to young people whose interests and needs have matured beyond the 4-H Club program, but who have not yet been effectively absorbed into adult extension work. More than 3,000 of this age group live in the rural areas of the average agricultural county. They have many important problems; yet they are not reached very effectively by any of the educational agencies now serving rural America.

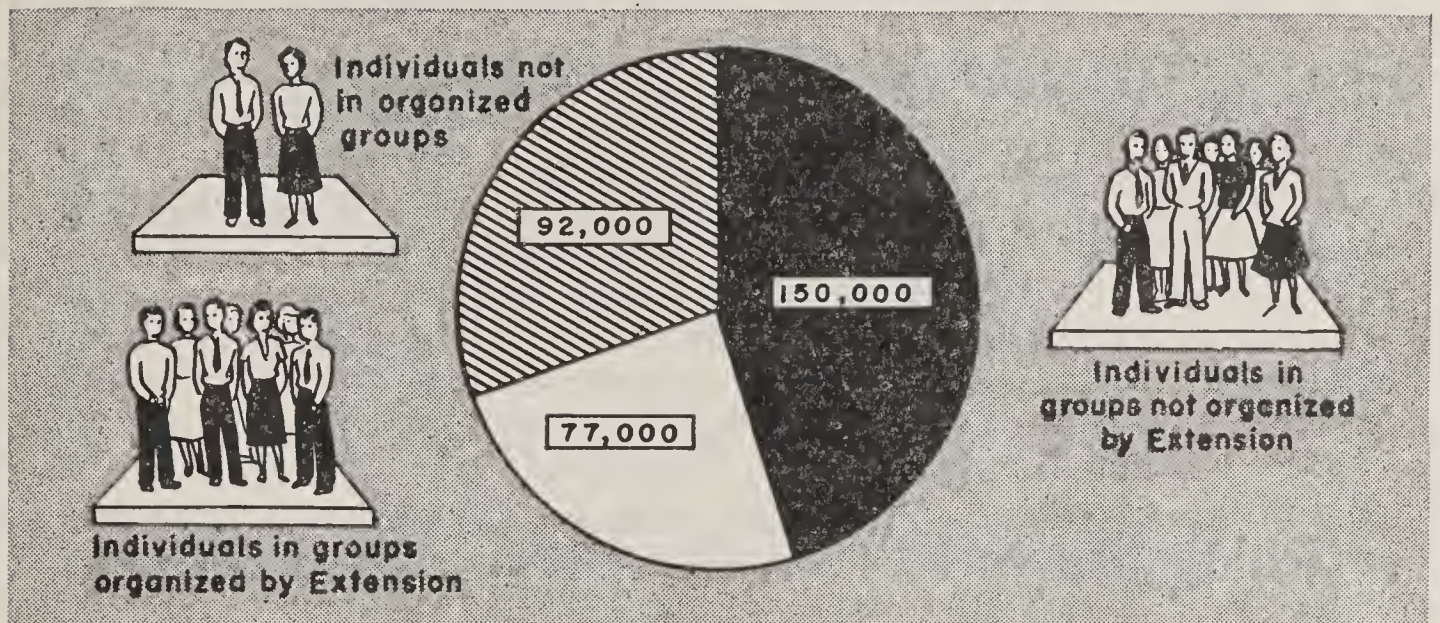
FARM AND NONFARM HOMES WITH 4-H'ERS



Of the total number of homes with 4-H Club members, 75 percent were farm homes.



## YMW PROGRAM



Extension workers reached more than 300,000 young men and women during the year. Nearly one-half of this number were in groups sponsored by organizations other than the Extension Service.

The major problems of young men and women on which their educational program must be based include: Marriage and establishment of home and family; getting started in an occupation; achieving adult social relationships; and assuming civic responsibilities.

To help fill these needs, Extension is making a continued effort to explore and develop suitable educational programs for young men and women. In 1951, this effort reached and helped more than 300,000 young people of this age. Nearly 77,000 of these were members of 1,891 clubs for young men and women organized by Extension. Extension workers conducted nearly 20,000 special meetings for this group. The attendance at these meetings was nearly 550,000. More than 150,000 were reached through some 4,600 other groups, and about 92,000 more were given assistance as individuals.

Reports of agricultural and home demonstration agents and specialists show that more and more young men and women are being reached through special activities of young farmers and young homemakers. In Minnesota, for example, a junior farm-managers' association grew out of a series of tours for the young farmers of Wright County, arranged with the cooperation of the county extension agent. Similar groups have been developed in other Minnesota counties and in other States.

The growing number of organized young men and women's clubs continues to demonstrate the value of youth participation in constructive self-help activities. In addition to the worth-while educational, social, and recreational activities such groups make possible, members receive training in the democratic group process and develop capacities important to good citizenship. These include effective leadership skills, habits of responsible participation, a spirit of cooperation and service to the community, the habit of objective and critical thinking, and an interest in continuing education. State and interstate conferences for these young people are proving increasingly popular. Considerable individual counseling and guidance is given to this age group by extension workers.



## EXTENSION—A TWO-WAY ROAD

The Nation-wide system of cooperative extension work in agriculture and home economics, the largest adult educational enterprise in the world, has played a large part in making the American standard of living the envy of the entire world. Government-sponsored, the Cooperative Extension Service is administered jointly by the land-grant colleges or universities in the States and the United States Department of Agriculture. Its financial support comes from Federal, State, and county sources. Its campus extends not only to every corner of each State in the United States but to Alaska, Puerto Rico, and Hawaii, and its students are found in nearly 7 million families.

Extension carries to the people information and technical know-how from the State experiment stations, the agricultural colleges, and the United States Department of Agriculture. But the system is a two-way affair. From the people to the experiment stations, agricultural colleges, and the Department of Agriculture, Extension carries requests for assistance, and suggestions for program planning, as well as practical knowledge whose workability has been tested on the farm and in the home.

### The Volunteer Leader—A Key Figure

Consulting local people and encouraging them to assume responsibility for determining problems and working out solutions through the local-leader method of extension teaching is a significant part of the pattern for carrying on cooperative extension work. This partnership of the people with Government-sponsored educational programs greatly strengthens the people's interest in extension organization and provides a program that is close to the people's needs and interests.

County extension agents enlisted the assistance of 1,174,000 volunteer local leaders in carrying forward the extension program in 1951. Of these, 668,000, or 57 percent, were women; 428,000, or 36 percent, were men; and the remaining 78,000, or 7 percent, were older boys and girls.

On the basis of the three major segments of the extension program, work with adult men and with adult women and work with youth, 46 percent of the local leaders were engaged in home demonstration work, 29 percent were working on adult agricultural work, and 25 percent were aiding the 4-H Club program.

One of the important jobs of local leaders is to work with the county extension agents in the development of the extension program. Most of these programs are developed through some type of county planning committee. These committees vary in size and operate under a wide range of names. Geographical areas and special agricultural and homemakers' groups are factors in the make-up of the committees. During 1951 there were 499,000 local leaders who served on committees to plan the county extension programs.



Volunteer local leaders not only help to plan the extension program, they also assist in extending improved practices in agriculture and home economics to their neighbors. County extension agents held more than 157,000 schools in 1951 where local leaders were trained to hold meetings and to extend the teachings of the agents to others in their communities. These training schools were attended by 2,356,500 persons. Local leaders, in turn, held 844,000 meetings, with an attendance of almost 14 million, during the year without extension agents being present.

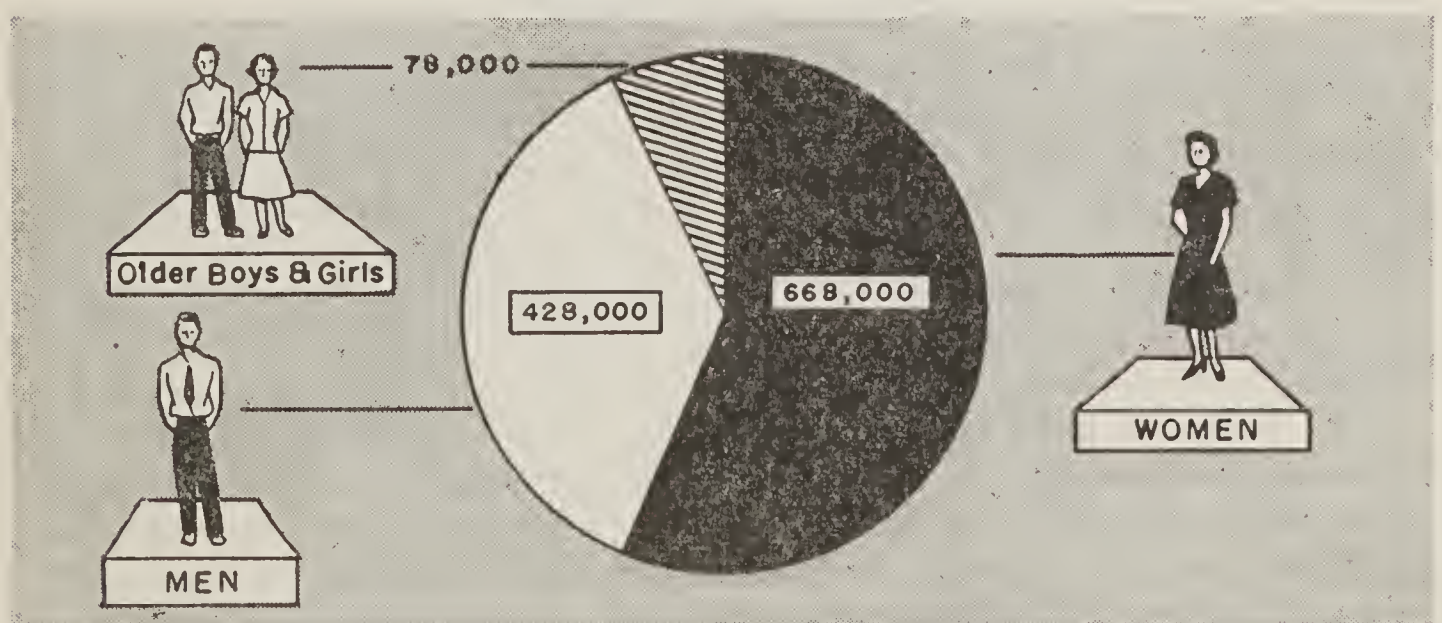
### THE FEDERAL OFFICE

Assisting the more than 12,500 State and county extension workers during the year was a Federal staff of workers, of whom 64 were professional. The Federal staff has a number of duties. It is responsible for entering into cooperative project agreements with the State extension services. It supervises the allotment and expenditure of Federal money for extension work in the States in compliance with these agreements and the appropriating laws.

It is responsible for handling relationships among the State and Territorial extension services—individually and as a group—and the various agencies of the Department of Agriculture for which Extension serves as the educational outlet. It is responsible for keeping State extension workers supplied with the information they need to carry to farm people relating to research results, policy, the national situation, and programs of all the bureaus of the Department and of other agencies of the Federal Government.

The Federal office also assumes leadership with the States in the development of broad extension programs, and assists the State extension services in local program development and in staff training in operations and teaching methods.

### VOLUNTEER LOCAL LEADERS



An army of volunteer local leaders—rural men, women, and older 4-H Club members—were actively engaged in forwarding the extension program in 1951.



### Subject Matter

The staff of the Division of Subject Matter is made up of subject-matter specialists in agriculture and home economics. The general purpose of their work is to assist the States, Alaska, Hawaii, and Puerto Rico, and the United States Department of Agriculture in doing a more effective educational job and to give extension leadership in solving national problems through program planning and other educational techniques. These specialists keep in close contact with the respective agencies or bureaus with which they are concerned. They not only carry information from the Department to the States, but also bring back from the States to the Department suggestions for dealing with problems that arise.

The specialists confer and work with State specialists on matters of national significance, and participate in State, regional, national, and international training meetings, and in other conferences and meetings. They also provide guidance in programs to their counterparts in the States through correspondence, circular letters, exchange of publications and of color slides, and in other ways. In cooperation with other bureaus of the United States Department of Agriculture and other agencies of the Federal Government, they prepare materials for use in film strips, motion pictures, charts, exhibits, and other visual aids. They also prepare bulletins and releases, take part in radio and television programs, and write articles for farm and home magazines.

Federal Extension specialists are responsible for the development of in-service training conferences and workshops in their field that keep State specialists up to date in successful teaching methods and techniques. They help to initiate and they assist in studies of the effectiveness of extension work in their subject-matter fields and in the training of extension personnel. They also cooperate with industry in broad national programs.

### Field Coordination

The Division of Field Coordination works mainly in the supervisory field, largely on a regional basis. Each of the regional field agents regularly visits State directors, supervisors, and others, and assists them in the general development, supervision, and coordination of extension programs. They help to extend good administrative and supervisory practices from one State to another, and take the lead in supervisory conferences and workshops and in other activities and events where national or regional coordination or leadership is needed.

The regional field agents are liaison agents between the State extension directors and State extension leaders and the Federal Extension office with respect to such matters as extension organization, program planning, public relations, and the initiation of new extension activities. The State administrative and supervisory plans of work are reviewed in the division.

In addition, the staff members of the division prepare articles featuring agricultural extension activities, home demonstration work,



and 4-H Club work, and the annual narrative reports of the different phases of extension work. Much of the orienting of foreign trainees and visitors is done by the Division of Field Coordination.

### **Agricultural Economics**

The Division of Agricultural Economics deals with problems of farm management and marketing, as well as with the related fields of sociology, rural health, farm tenure, farm finances, income taxes and accounting, and discussions of public policies. These workers take the lead in supplying State extension services with current information and extension-program guidance in these fields.

The time of these specialists is spent largely in the field and in working on economic problems raised by specialists and agents in the States. Special materials are prepared, educational methods are explained, and assistance is given in the conduct of State economic programs.

The marketing staff of this Division is responsible for administration and supervision of all State extension projects financed under the Agricultural Marketing Act of 1946. These projects deal with commodity marketing problems, market information, educational work with retailers and other handlers, and consumer-marketing education.

### **Field Studies and Training**

The Division of Field Studies and Training takes the lead in helping State extension services to study scientifically the effectiveness of various extension methods. This group brings together from State and county reports data that show extension activities and results nationally. It assumes the lead in helping the States to organize in-service training programs and to train the many persons from other countries who are studying extension methods in the United States.

The members of this Division assist the States in training persons to take the lead in studies to improve extension in each State. Studies are aimed at helping extension workers appraise their efforts more systematically, at improving extension teaching, and providing scientific information about Extension and the people it serves. Findings from such studies provide the basis for policies and procedures designed to increase the effectiveness of all extension workers in carrying out programs. Research activities promoted in the various States and others carried on directly by the Division staff are as varied as the scope of extension activities throughout the Nation.

The Division helps to hold summer schools that give advanced training to extension workers.

### **Extension Information**

Through the daily and weekly press, farm magazines, radio, television, bulletins, visual aids, and similar communication channels, Extension is able to multiply its teaching influence many times, and carry localized information on improved farm and homemaking practices into millions of homes. Cooperation and interest on the part of



newspaper and magazine editors and radio and television management are important in making possible this accomplishment.

Exhibits, circular letters, motion pictures, picture slides, film strips, and posters are widely used by agents. State extension editors work closely with State agricultural mobilization committees in disseminating information on agricultural programs, especially those concerned with the Nation's broad-scale defense efforts.

Disseminating useful information is a job of all Federal Extension workers. The Division of Extension Information takes the lead in developing and improving information programs, in training State and county workers in use of news, radio, publications, visual aids, and other mass educational outlets, and in supplying educational material and teaching aids from the United States Department of Agriculture for State and county extension use.

Extension workers are kept up to date on better information methods, and effective ideas are exchanged. Cooperators in other agencies are helped to understand various programs through the Extension Service Review, monthly extension house organ, and through other means.

### **Business Administration**

A major job in the Federal office is the allotment and accounting of funds, the handling of personnel actions, and the maintenance of required personnel records for the more than 12,500 professional extension workers throughout the country. This work is done by the Division of Business Administration. Among the increases in work with which this Division has had to deal since 1945 has been the bringing of several thousand cooperative extension employees under the Federal retirement system. This action has increased substantially the amount of correspondence and accounting work.

### **FUNDS AND PERSONNEL**

The Cooperative Extension Service—Federal, State, and county—had in its employ a total of 12,657 professional workers at the close of the fiscal year 1952. The expenditure of funds from all sources in carrying out Extension's educational program for the fiscal year 1952 amounted to approximately \$78,800,000. (This included expenditures for the Federal office.)

Section 3 of the Smith-Lever Act of 1914 provides that the permanently appropriated sum of \$4,100,000 annually shall be allotted to the States by the Secretary of Agriculture in the proportion which the rural population of each State bears to the total rural population of all the States as determined by the next preceding Federal census.

The same proviso applies to the allotment of the sum of \$500,000 authorized to be appropriated each year by the Capper-Ketcham Act of 1928. Section 21, title II, of the Bankhead-Jones Act of 1935 authorizes an annual appropriation of \$12,000,000, of which \$11,020,000 shall be paid to the several States and the Territory of Hawaii in the proportion that the farm population of each bears to the total farm population of the several States and the Territory of Hawaii as determined by the last preceding decennial census.

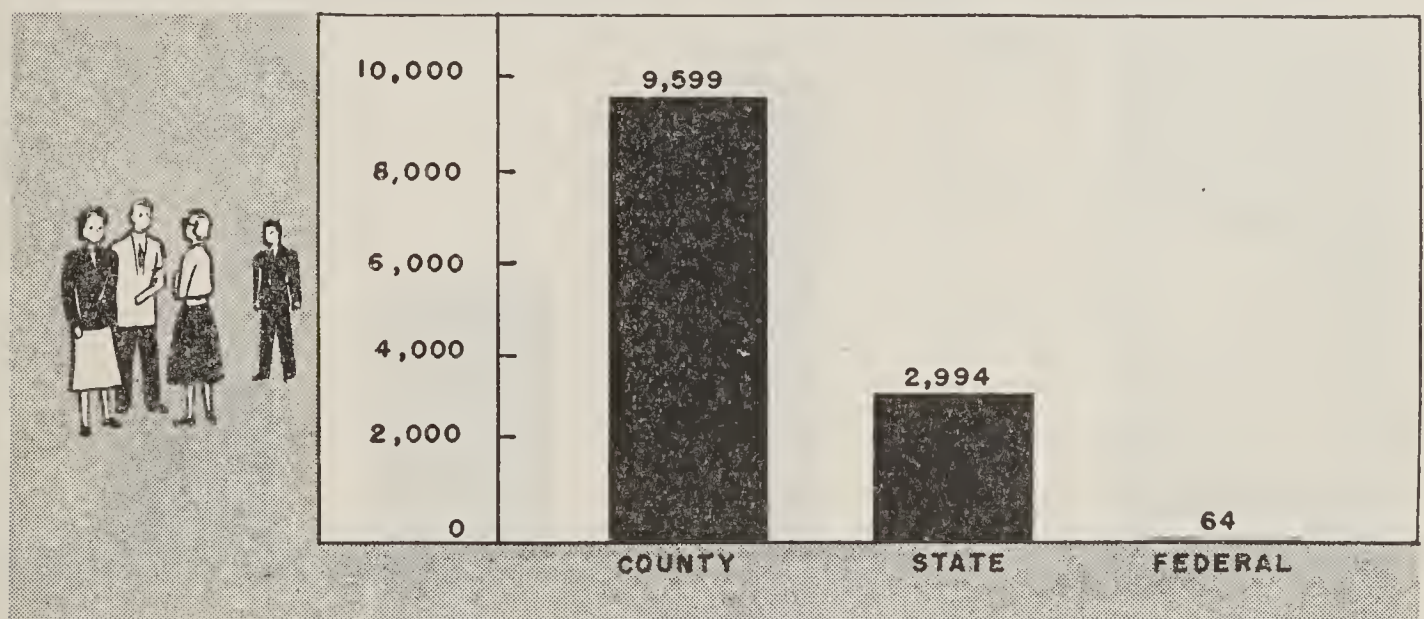


Ordinarily, the redistribution of these Cooperative Extension funds to the States on the basis of the new census is made for the second fiscal year following the year in which the decennial census is taken. The redistribution of the Smith-Lever and Capper-Ketcham funds on the basis of the fiscal 1950 rural population census figures was made by the Department in the second semiannual payment of Federal Cooperative Extension funds for the fiscal year 1952 on December 31, 1951. Because the Bureau of the Census was unable to issue preliminary farm population figures for each State prior to July 1, 1951, no change was made in the distribution of the Bankhead-Jones extension funds for the fiscal year 1952.

No Federal funds were withheld from the States during the fiscal year 1952 for failure to comply with the requirements set down by Congress.

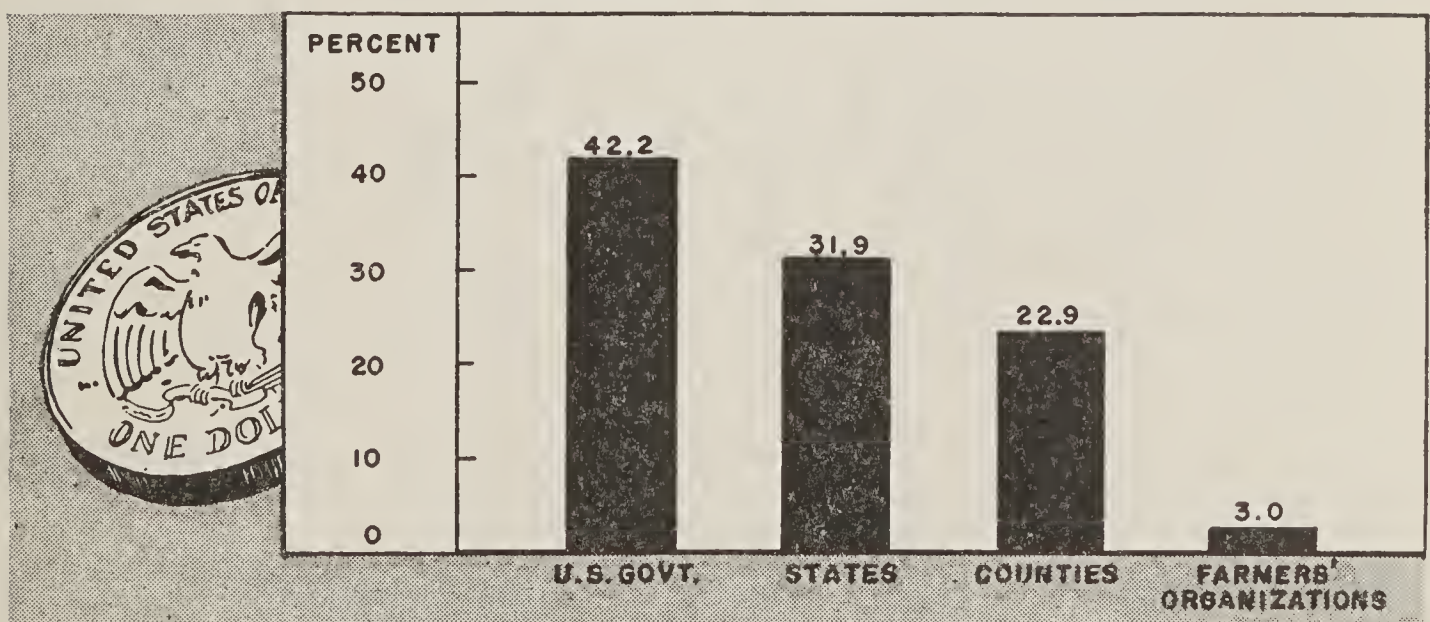
### Statistics

Illustrations and tables showing personnel divisions, sources of funds, and distribution of funds follow.



Three out of four professional extension workers served in the counties during the fiscal year 1952.

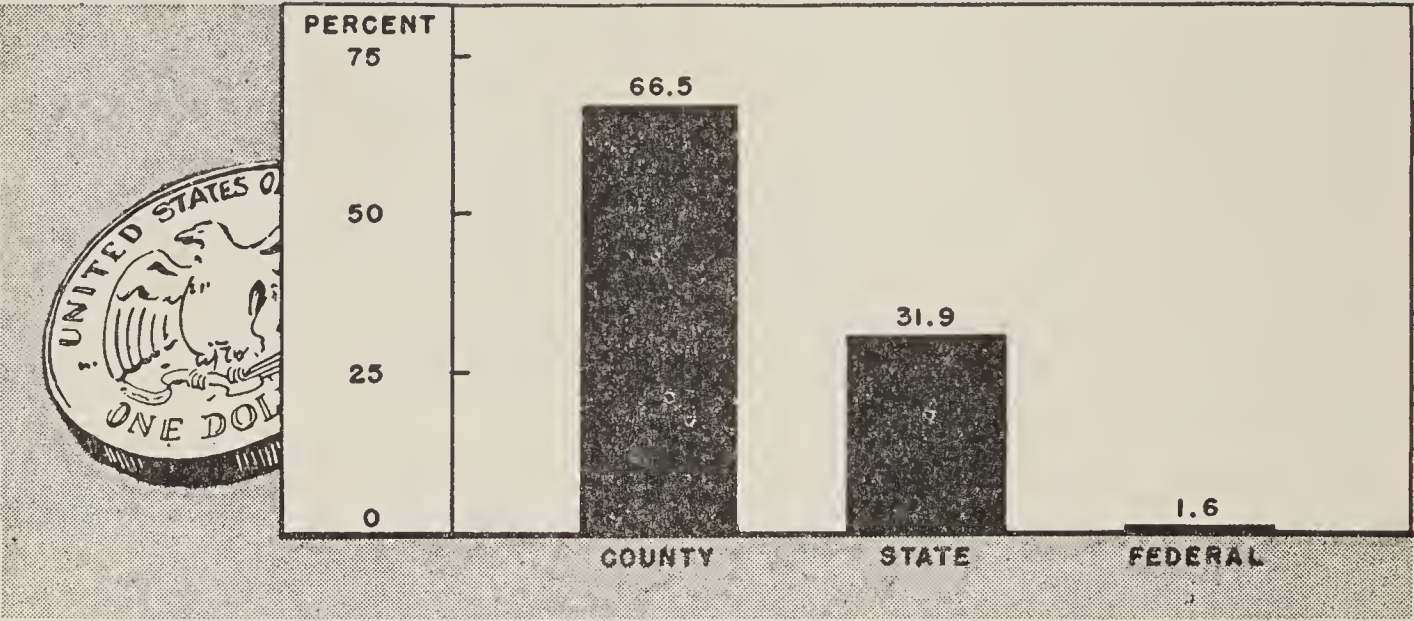
### SOURCES OF FUNDS



Sources of funds for extension work, 1950-51.

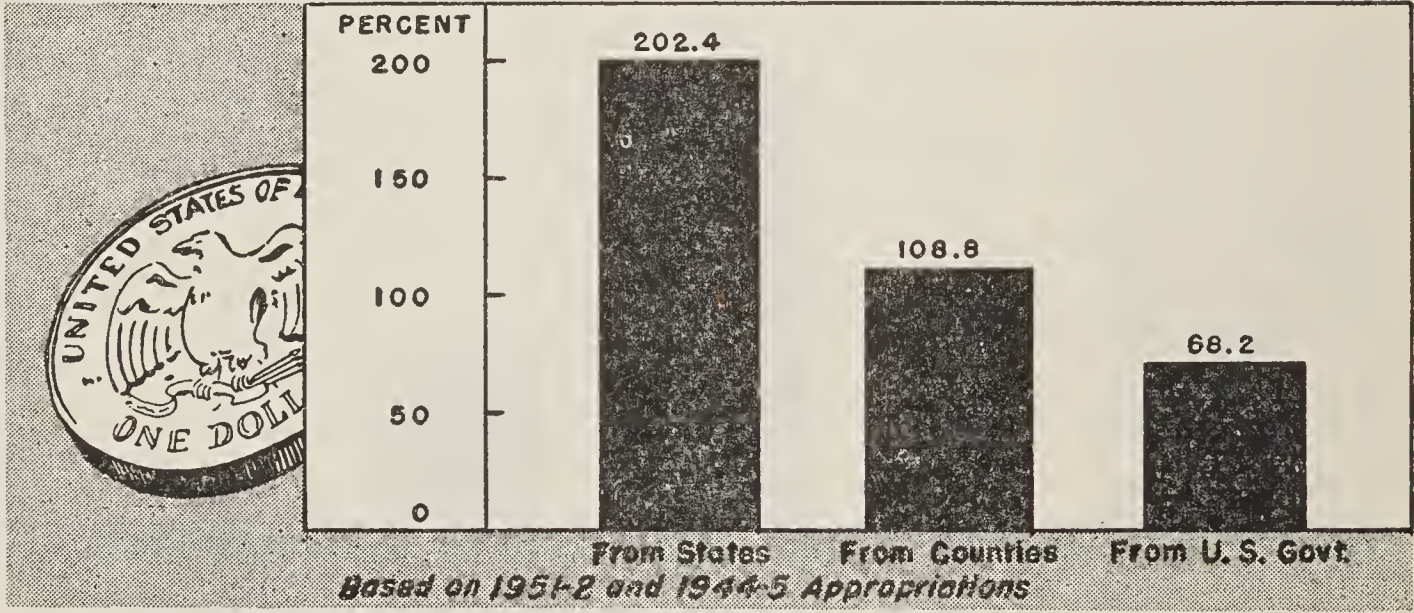


WHERE SPENT



Funds spent by Federal, State, and county extension offices, 1950-51.

PERCENTAGE OF INCREASE OF EXTENSION FUNDS SINCE 1945



Percentage of increase of extension funds since 1945, based on 1951-52 and 1944-45 appropriations.



TABLE 1.—Number of counties with county extension agents, July 1, 1915, 1925, 1935, 1945, and 1952

State	Number of agricultural counties in State	Counties with agents on July 1—									
		1915		1925		1935		1945		1952	
		County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents	County agricultural agents	Home demonstration agents
Alabama.....	67	67	19	59	37	67	44	67	67	67	67
Arizona.....	14	3	-----	12	9	11	6	12	9	12	<sup>1</sup> 12
Arkansas.....	75	52	20	50	39	75	72	75	75	75	75
California.....	54	11	-----	43	22	43	25	43	32	50	42
Colorado.....	52	13	-----	20	2	45	5	46	26	<sup>1</sup> 52	<sup>1</sup> 32
Connecticut.....	8	6	-----	8	7	8	8	8	8	8	8
Delaware.....	3	3	-----	3	-----	3	3	3	3	3	3
Florida.....	63	36	27	36	30	44	29	61	40	63	47
Georgia.....	158	81	48	121	61	155	80	140	114	156	126
Idaho.....	44	3	-----	16	27	31	37	33	44	41	20
Illinois.....	102	18	-----	95	21	97	39	102	82	<sup>1</sup> 102	<sup>1</sup> 99
Indiana.....	92	31	-----	79	1	91	12	92	58	92	75
Iowa.....	99	11	-----	99	15	99	35	97	74	99	74
Kansas.....	105	39	-----	63	15	100	27	99	52	105	<sup>1</sup> 91
Kentucky.....	120	39	19	72	24	114	29	116	76	120	97
Louisiana.....	64	43	13	48	24	62	52	64	64	64	64
Maine.....	16	3	-----	16	15	16	15	16	16	<sup>1</sup> 16	<sup>1</sup> 16
Maryland.....	23	13	6	23	19	23	23	23	23	23	22
Massachusetts.....	12	10	-----	11	11	11	10	11	11	11	11
Michigan.....	83	17	-----	57	5	73	5	82	46	<sup>1</sup> 83	<sup>1</sup> 70
Minnesota.....	87	23	-----	58	8	86	11	87	38	87	60
Mississippi.....	82	49	33	54	44	79	69	82	77	82	80
Missouri.....	114	15	-----	50	9	114	14	111	93	114	107
Montana.....	56	8	-----	23	6	40	8	46	19	<sup>1</sup> 51	25
Nebraska.....	93	8	-----	43	2	93	14	86	32	<sup>1</sup> 86	45
Nevada.....	16	-----	-----	8	9	14	6	15	10	<sup>1</sup> 15	<sup>1</sup> 8
New Hampshire.....	10	5	-----	10	8	10	10	10	10	10	10
New Jersey.....	20	7	-----	18	11	19	15	20	18	20	20
New Mexico.....	31	8	-----	21	5	24	10	30	14	30	18
New York.....	56	29	-----	55	38	51	37	56	51	56	56
North Carolina.....	100	64	34	74	49	97	53	100	100	100	100
North Dakota.....	53	15	-----	33	1	53	4	44	8	53	19
Ohio.....	88	10	-----	85	15	84	22	86	64	88	81
Oklahoma.....	77	56	24	65	44	77	68	77	77	77	77
Oregon.....	36	12	-----	28	3	34	6	36	23	36	28
Pennsylvania.....	67	14	-----	63	28	65	63	66	66	67	67
Rhode Island.....	5	-----	-----	5	2	5	5	5	5	<sup>1</sup> 5	<sup>1</sup> 5
South Carolina.....	46	43	24	40	38	46	46	46	46	46	46
South Dakota.....	67	5	-----	34	32	69	27	48	27	58	<sup>1</sup> 42
Tennessee.....	95	38	24	50	26	95	42	94	77	95	92
Texas.....	254	99	27	155	88	235	151	244	202	<sup>1</sup> 253	<sup>1</sup> 194
Utah.....	29	10	-----	18	11	21	8	27	13	28	21
Vermont.....	14	9	-----	12	7	14	11	14	12	14	13
Virginia.....	99	55	22	65	35	93	42	99	82	99	<sup>1</sup> 86
Washington.....	39	10	-----	26	5	38	8	37	25	39	33
West Virginia.....	55	27	10	36	15	44	27	52	38	50	38
Wisconsin.....	71	12	-----	48	1	65	7	68	48	71	66
Wyoming.....	23	6	-----	16	5	20	7	20	12	22	20
Alaska.....	4	-----	-----	-----	-----	-----	-----	4	4	2	3
Hawaii.....	5	-----	-----	-----	-----	4	4	5	5	4	4
Puerto Rico.....	60	-----	-----	-----	-----	-----	-----	36	31	57	58
Total.....	3, 106	1, 136	350	2, 124	929	2, 857	1, 351	2, 941	2, 247	3, 056	2, 573

<sup>1</sup> Some agents cover two or more counties.



TABLE 2.—Number of extension workers, June 30, 1952<sup>1</sup>

State or Territory	Number of agricultural counties	Directors and assistant directors	County agent work				Home demonstration work				Boys' and girls' club work <sup>2</sup>				Total																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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			State leaders	Assistant State leaders and district agents	County agents	Assistant county agents	State leaders	Assistant State leaders and district agents	County agents	Assistant county agents	State leaders	Assistant State leaders and district agents	County agents	Assistant State leaders and district agents																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Tennessee.....	95	3	---	6	97	86	1	1	13	---	5	92	38	---	1	12	1	3	---	---	---	2	51	412
Texas.....	254	3	1	13	245	91	1	3	56	1	14	187	38	1	2	46	1	3	---	---	---	4	64	774
Virginia.....	99	4	---	6	96	54	1	1	30	---	6	91	20	---	1	31	1	4	---	---	---	3	65	414
Puerto Rico.....	60	2	1	5	57	36	---	---	---	---	5	60	6	---	---	---	1	1	---	---	---	1	36	212
Region total.....	1,360	36	3	76	1,347	962	8	19	383	12	79	1,212	459	2	18	386	16	48	---	---	7	41	644	5,761
NORTH CENTRAL REGION																								
Illinois.....	102	2	---	7	99	37	---	---	---	1	5	94	25	---	---	---	1	9	50	7	---	4	59	400
Indiana.....	92	2	---	5	92	50	---	---	---	1	3	76	2	---	---	---	1	12	30	---	---	7	67	348
Iowa.....	99	4	---	6	100	5	---	---	---	---	5	73	28	---	---	---	3	6	53	---	---	5	101	389
Kansas.....	105	2	---	6	105	3	---	---	---	1	5	89	5	---	---	---	1	5	35	2	---	3	57	319
Michigan.....	83	2	1	5	75	15	---	---	---	1	3	55	3	---	---	---	1	10	55	2	---	8	82	318
Minnesota.....	87	2	---	3	91	10	---	---	---	1	3	61	4	---	---	---	1	9	60	---	---	3	42	290
Missouri.....	114	3	1	5	114	95	---	---	---	1	6	104	8	---	---	4	1	6	---	---	---	5	40	393
Nebraska.....	93	2	1	5	80	15	---	---	---	1	3	41	4	---	---	---	1	5	---	---	---	3	36	197
North Dakota.....	53	1	1	4	51	5	---	---	---	1	1	15	1	---	---	---	1	4	---	---	---	3	23	111
Ohio.....	88	3	---	5	88	51	---	---	---	1	4	82	---	---	---	---	1	5	2	---	---	1	57	300
South Dakota.....	67	2	---	3	58	9	---	---	---	1	1	35	1	---	---	---	2	6	---	---	---	1	29	148
Wisconsin.....	71	3	---	6	71	37	---	---	---	1	4	66	3	---	---	---	1	5	37	---	---	9	60	303
Region total.....	1,054	28	4	60	1,024	332	---	---	---	11	43	791	84	---	---	4	15	82	322	11	---	52	653	3,516
WESTERN REGION																								
Arizona.....	14	2	---	---	12	9	---	---	---	1	---	8	1	---	---	---	1	1	---	---	---	---	15	50
California.....	54	3	---	6	50	170	---	---	---	1	3	42	40	---	---	---	---	6	---	---	---	---	45	366
Colorado.....	52	2	---	2	47	7	---	---	---	1	1	28	4	---	---	---	1	3	17	---	---	2	23	138
Idaho.....	44	2	---	3	41	1	---	---	---	1	---	18	2	---	---	---	1	1	9	---	---	---	21	100
Montana.....	56	2	---	3	46	6	---	---	---	1	1	25	5	---	---	---	1	2	---	---	---	1	28	121
Nevada.....	16	4	---	---	11	3	---	---	---	---	---	6	---	---	---	---	---	---	---	---	---	---	4	28
New Mexico.....	31	3	1	---	30	23	---	---	---	1	---	17	13	---	---	---	1	2	---	---	---	6	18	115
Oregon.....	36	5	---	2	38	32	---	---	---	1	2	28	7	---	---	---	1	4	25	8	---	1	46	200
Utah.....	29	2	1	---	29	7	---	---	---	1	---	22	---	---	---	---	1	1	---	---	---	4	23	91
Washington.....	39	2	---	3	39	49	---	---	---	---	3	32	9	---	---	---	1	3	---	---	---	2	25	168
Wyoming.....	23	2	1	---	23	9	---	---	---	1	---	19	2	---	---	---	2	---	---	---	---	1	15	75
Alaska.....	4	2	---	---	3	---	---	---	---	1	---	6	1	---	---	---	---	---	---	---	---	1	2	16
Hawaii.....	5	2	1	---	9	23	---	---	---	1	1	9	12	---	---	---	1	2	---	---	---	3	14	78
Region total.....	403	33	4	19	378	339	---	---	---	11	11	260	96	---	---	---	11	25	51	8	---	21	279	1,546
Grand total.....	3,106	119	21	162	3,028	1,838	9	19	393	46	144	2,531	754	2	19	407	56	181	543	102	7	3	140	12,593
June 30, 1951.....	3,106	119	22	160	3,017	1,893	9	19	386	45	142	2,505	756	2	19	397	57	180	545	107	7	3	188	12,642

<sup>1</sup> Workers in the Washington, D. C., office are not included.  
<sup>2</sup> These are special 4-H Club workers. In the majority of States, Alaska, Hawaii, and Puerto Rico, 4-H Club work is conducted by county agricultural agents, county home demonstration agents, and their assistants.  
<sup>3</sup> Includes 26 special part-time 4-H Club agents.



TABLE 3.—Expenditures of funds from all sources for cooperative agricultural extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ended June 30, 1951, by sources of funds, and totals for 1946-50

State	Grand total	Total Federal funds	Total within the State	Funds from Federal sources							Funds from within States			
				U. S. Department of Agriculture		Smith-Lever and Bankhead-Jones	Bankhead-Flannagan	Capper-Ketcham	Additional cooperative	Farm housing Title V Housing Act of 1949	Research and marketing	State and college	County	Local nonpublic sources
				Clarke-McNary	Norris-Doxey									
Ala.-----	\$2,389,168.22	\$1,228,141.67	\$1,161,026.55		\$1,620.00	\$654,071.94	\$514,435.98	\$37,220.03	\$3,724.15	\$640.00	\$16,429.57	\$660,776.99	\$500,249.56	-----
Ariz.-----	369,868.49	179,252.96	190,615.53			94,410.17	62,009.57	22,833.22				124,640.39	65,975.14	-----
Ark.-----	1,665,477.00	982,505.41	682,971.59		1,620.00	538,543.78	396,774.68	33,217.36	6,949.16	283.72	5,116.71	449,670.59	233,301.00	-----
Calif.-----	3,226,173.04	710,962.92	2,515,210.12		\$1,620.00	414,446.82	256,791.30	37,464.80		640.00		1,694,169.43	813,363.52	\$7,677.17
Colo.-----	892,927.32	363,328.33	529,598.99		1,260.00	158,977.29	141,853.37	24,638.47	27,395.83	640.00	8,563.37	230,363.00	299,235.99	-----
Conn.-----	631,075.49	180,550.02	450,525.47		1,620.00	107,119.99	40,145.07	24,799.96		528.01	6,336.99	268,522.61	164,195.86	17,807.00
Del.-----	168,956.50	103,508.16	65,448.34			55,616.39	18,459.29	21,106.82		637.93	7,687.73	57,787.16	6,950.29	710.89
Fla.-----	1,183,523.07	348,064.08	835,458.99		1,620.00	197,150.05	119,861.58	27,417.72		560.15	1,454.58	436,016.93	385,228.31	14,213.75
Ga.-----	2,276,445.67	1,269,151.16	1,007,294.51		1,620.00	668,110.80	523,822.69	37,854.95	26,432.70	640.00	9,050.02	474,528.93	532,765.58	-----
Idaho.-----	730,541.15	275,996.79	454,544.36		1,485.00	127,709.65	118,424.08	23,032.55	3,445.51	640.00		281,488.85	158,015.33	15,040.18
Ill.-----	2,881,692.21	964,363.33	1,917,328.88		1,620.00	531,169.12	374,947.87	38,183.11	10,736.90	96.20	5,990.13	625,706.30	12,632.40	1,278,990.18
Ind.-----	2,474,726.94	798,707.29	1,676,019.65		1,620.00	433,581.40	312,706.35	33,414.27		640.00	16,745.27	734,076.81	730,467.17	21,475.67
Iowa.-----	2,306,995.62	911,928.29	1,395,067.33		1,620.00	468,515.29	356,525.41	32,664.80	28,020.63	640.00	22,389.66	687,493.44	349,984.45	357,589.44
Kans.-----	2,235,288.48	651,112.65	1,584,175.83		1,620.00	323,026.48	232,375.97	29,120.22	50,228.73	640.00	14,101.25	339,774.17	1,221,201.66	23,200.00
Ky.-----	2,039,633.86	1,155,041.35	884,592.51			625,981.53	483,012.44	37,387.96		640.00	6,399.42	508,263.38	376,329.13	-----
La.-----	1,971,089.07	805,648.23	1,165,440.84		1,620.00	435,848.30	327,085.57	32,049.90		640.00	8,404.46	966,292.22	195,116.62	4,032.00
Maine.-----	441,821.33	236,341.21	205,480.12		1,620.00	129,431.86	72,517.33	24,391.36	2,216.53	640.00	5,524.13	134,386.97	55,403.91	15,689.24
Md.-----	950,955.82	317,051.95	633,903.87		1,620.00	171,298.96	94,080.25	26,450.68		638.92	22,963.14	539,702.19	94,201.68	-----
Mass.-----	961,623.76	206,818.22	754,805.54		1,620.00	114,993.33	55,755.76	23,982.65		110.97	10,355.51	279,700.32	475,105.22	-----
Mich.-----	2,237,263.46	879,688.99	1,357,574.47			471,836.40	333,552.22	35,688.96		640.00	34,731.41	948,355.96	409,218.51	-----
Minn.-----	1,611,338.32	846,846.32	764,492.00		1,620.00	458,982.90	341,505.31	32,213.31		640.00	10,264.80	302,017.32	421,751.68	40,723.00
Miss.-----	2,282,742.06	1,261,849.29	1,020,892.77		1,620.00	659,454.04	537,441.35	35,250.62		640.00	25,823.28	510,338.33	477,025.55	33,528.89
Mo.-----	2,154,285.96	1,056,701.32	1,097,584.64		1,620.00	564,917.54	431,063.63	35,886.93	1,686.98	640.00	20,886.24	386,400.00	526,019.50	185,165.14
Mont.-----	806,074.76	289,358.61	516,716.15			118,067.76	107,362.06	23,030.42	32,217.74	640.00	6,780.63	234,741.99	278,532.00	3,442.16
Nebr.-----	1,127,890.13	544,861.47	583,028.66		1,620.00	266,393.57	192,831.74	26,982.76	49,781.81	640.00	6,611.59	294,573.94	288,454.72	-----
Nev.-----	252,965.41	117,947.43	135,017.98			40,493.58	43,075.58	20,583.19	11,955.08	640.00		85,335.64	49,682.34	-----
N. H.-----	361,258.46	131,131.34	230,127.12		1,620.00	70,238.64	28,997.28	21,814.30	1,134.54	640.00	6,686.58	126,201.46	103,925.66	-----
N. J.-----	908,089.25	227,971.25	680,118.00		1,620.00	136,095.93	54,795.08	26,666.64	8,153.60	640.00		314,166.02	365,951.98	-----
N. Mex.-----	739,895.78	276,390.16	463,505.62			119,523.81	111,312.49	23,095.71		640.00	21,818.15	335,879.27	126,630.65	995.70
N. Y.-----	4,803,812.43	805,981.84	3,997,830.59		1,620.00	457,186.94	279,552.42	40,137.35		640.00	26,125.13	1,991,156.83	1,971,962.97	34,710.79
N. C.-----	3,956,517.81	1,497,151.65	2,459,366.16		1,620.00	812,167.22	635,624.59	42,624.01		409.91	4,705.92	1,344,549.00	1,114,817.16	-----
N. Dak.-----	806,886.50	415,201.98	391,684.52		1,620.00	182,472.40	157,800.67	24,442.25	38,705.53	514.57	9,646.56	133,947.47	257,737.05	-----



Ohio-----	1,908,541.08	1,043,836.40	864,704.68	1,620.00	-----	583,497.98	414,118.37	39,986.40	-----	613.65	4,000.00	413,983.80	442,807.61	7,913.27
Okla-----	1,922,734.74	938,200.99	984,533.75	-----	1,620.00	468,568.12	356,372.97	32,688.61	51,344.98	640.00	26,966.31	771,334.19	213,199.56	-----
Oreg-----	1,570,996.18	339,141.31	1,231,854.87	1,620.00	-----	162,916.56	137,108.63	24,860.31	-----	640.00	11,995.81	787,687.69	444,167.18	-----
Pa-----	1,979,296.50	1,001,043.53	978,252.97	1,620.00	-----	595,926.62	349,547.76	48,859.18	-----	634.99	4,454.98	718,252.97	260,000.00	-----
R. I-----	147,927.84	66,195.62	81,732.22	-----	-----	37,693.91	6,629.43	20,522.28	-----	-----	1,350.00	60,324.55	15,175.00	6,232.67
S. C-----	1,557,797.94	863,104.14	694,693.80	1,620.00	1,620.00	461,957.51	351,086.81	32,487.60	2,352.22	640.00	11,340.00	599,290.00	83,393.80	12,010.00
S. Dak---	842,869.95	406,073.62	436,796.33	-----	1,620.00	174,458.60	140,989.73	24,223.30	59,839.87	409.40	4,532.72	267,530.95	165,415.38	3,850.00
Tenn-----	2,002,366.34	1,161,028.83	841,337.51	1,620.00	-----	623,494.36	488,582.42	36,450.19	-----	640.00	10,241.86	496,695.24	342,212.27	2,430.00
Tex-----	3,873,495.66	2,028,059.77	1,845,435.89	1,620.00	-----	1,056,695.90	827,165.32	50,515.24	82,238.79	640.00	9,184.52	746,383.87	1,094,353.69	4,698.33
Utah-----	530,386.76	215,211.51	315,175.25	1,259.98	-----	84,702.25	80,086.85	22,132.38	13,607.42	634.00	12,788.63	216,285.25	98,890.00	-----
Vt-----	361,285.89	170,175.51	191,110.38	1,299.96	-----	85,171.59	52,804.64	22,055.51	5,453.81	1,390.00	2,000.00	121,487.58	69,622.80	-----
Va-----	2,217,223.47	936,012.50	1,281,210.97	1,620.00	1,282.50	508,488.49	377,835.89	35,095.44	-----	386.00	11,304.18	995,028.33	286,182.64	-----
Wash-----	1,469,691.96	409,341.68	1,060,350.28	1,620.00	-----	209,539.32	160,383.18	27,091.95	-----	640.00	10,067.23	624,802.41	435,547.87	-----
W. Va-----	1,122,421.71	559,507.21	562,914.50	-----	1,620.00	319,286.65	204,005.18	31,904.41	-----	634.02	2,056.95	441,266.69	121,647.81	-----
Wis-----	2,130,295.37	847,747.10	1,282,548.27	1,620.00	1,620.00	451,633.76	335,260.11	32,703.17	1,214.93	-----	23,695.13	455,253.00	827,295.27	-----
Wyo-----	519,725.58	186,536.82	333,188.76	1,260.00	-----	67,441.38	72,919.61	21,368.92	19,571.91	640.00	3,335.00	218,017.76	115,171.00	-----
Alaska---	94,034.32	60,096.88	33,937.44	-----	-----	34,758.00	862.00	20,480.00	-----	640.00	3,356.88	33,937.44	-----	-----
Hawaii---	508,344.49	187,375.67	320,968.82	-----	-----	88,094.83	45,487.34	21,385.77	16,590.65	349.00	15,468.08	320,968.82	-----	-----
P. R-----	1,009,743.34	613,101.79	396,641.55	1,620.00	-----	510,691.11	39,998.97	31,345.00	-----	639.51	28,807.20	396,641.55	-----	-----
Total--	77,616,182.49	32,071,346.55	45,544,835.94	55,524.94	31,215.00	17,132,850.82	12,197,744.19	1,531,802.94	555,000.00	28,670.95	538,537.71	25,186,196.00	18,076,514.47	2,282,125.47
1950 1----	74,564,545.99	31,649,625.98	42,914,920.01	55,594.39	31,270.50	17,067,457.51	11,911,635.60	1,489,438.30	554,564.93	96,397.07	443,267.68	23,637,481.33	16,331,745.94	2,945,692.74
1949 1----	67,242,461.07	30,303,537.64	36,938,923.43	56,075.96	29,185.50	17,094,149.88	10,805,623.55	1,487,839.81	555,000.00	-----	275,662.94	19,442,773.13	15,015,471.60	2,480,678.70
1948 2----	60,207,189.89	26,967,557.20	33,239,632.69	55,432.71	29,892.00	16,953,927.52	7,883,788.53	1,489,516.44	555,000.00	-----	-----	17,557,809.96	13,535,228.33	2,146,594.40
1947 2----	53,722,420.26	26,154,356.82	27,568,063.44	51,692.17	28,196.00	16,812,763.58	7,217,296.13	1,489,408.94	555,000.00	-----	-----	13,815,549.25	11,857,666.04	1,894,848.15
1946 2----	44,570,306.10	22,576,671.18	21,993,634.92	53,341.58	23,403.43	16,756,606.54	3,703,848.95	1,486,280.19	553,190.49	-----	-----	10,752,505.45	9,857,851.23	1,383,278.24

1 Farm-labor funds are not included.

2 Farm-labor funds and research-and-marketing funds are not included.



TABLE 4.—Expenditures of funds from all sources for cooperative agricultural extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year 1950-51, by nature of expenditures

State	Administration		Printing and distribution of publications		Specialists		County agent work		Home demonstration work	
	Dollars	Per-cent	Dollars	Per-cent	Dollars	Per-cent	Leadership	County	Leadership	County
Connecticut.....	20,922.47	3.3	10,633.80	1.7	187,450.89	29.7	6,907.53	1.1	8,955.58	1.4
Delaware.....	12,313.67	7.3	2,291.94	1.4	70,120.44	41.5	3,081.05	1.8	6,913.35	4.1
Maine.....	31,810.96	7.2	5,472.35	1.2	109,859.10	24.9	7,789.76	1.8	10,595.96	2.4
Maryland.....	33,430.77	3.5	12,960.25	1.4	410,090.16	43.1	32,780.19	3.5	25,617.67	2.7
Massachusetts.....	25,640.25	2.7	7,049.45	1.1	283,888.66	29.5	10,890.73	1.1	18,137.48	1.9
New Hampshire.....	20,689.19	5.7	3,932.05	1.1	97,515.73	27.0	7,655.53	2.1	160,420.02	16.8
New Jersey.....	16,812.33	1.8	6,001.46	1.7	193,944.98	21.3	28,775.98	3.2	55,157.47	15.3
New York.....	304,048.75	6.3	117,406.45	2.4	1,456,038.26	30.3	46,422.81	1.0	13,508.00	1.5
Pennsylvania.....	73,157.22	3.7	27,123.08	1.4	522,764.37	26.4	5,801.45	3.3	71,517.50	15.6
Rhode Island.....	8,744.00	5.9	2,144.00	1.4	43,035.20	29.1	4,229.44	2.9	36,358.15	1.8
Vermont.....	17,576.74	4.9	4,342.02	1.2	97,360.38	26.9	10,177.97	2.8	6,261.73	4.2
West Virginia.....	37,811.87	3.4	11,312.60	1.0	169,300.72	15.1	34,181.63	3.0	10,001.29	2.8
Total.....	602,958.22	4.7	210,669.45	1.7	3,641,368.89	28.4	198,694.07	1.5	245,375.30	1.9
Alabama.....	53,127.20	2.2	51,029.69	2.2	303,253.65	12.7	85,871.51	3.6	74,541.40	3.1
Arkansas.....	67,187.15	4.1	23,141.92	1.4	191,228.10	11.5	56,836.35	3.4	55,392.27	3.3
Florida.....	43,761.48	3.7	10,180.42	.9	186,202.03	15.7	36,780.54	3.1	43,020.68	3.6
Georgia.....	44,803.52	2.0	9,410.58	.4	312,151.97	13.7	72,250.55	3.2	65,479.55	2.9
Kentucky.....	52,979.15	2.6	8,257.90	.4	261,583.94	12.8	61,095.19	3.0	51,379.05	2.5
Louisiana.....	25,894.21	1.3	11,345.72	.6	312,453.48	15.9	113,885.33	5.8	49,537.07	2.5
Mississippi.....	52,962.77	2.3	16,648.40	.7	378,333.26	16.6	74,882.55	3.3	65,224.59	2.9
North Carolina.....	63,911.08	1.6	37,963.18	1.0	538,882.98	13.6	108,691.61	2.7	106,424.69	2.7
Oklahoma.....	31,193.23	1.6	70,367.07	3.7	347,571.69	18.1	90,745.05	4.7	76,097.61	3.9
South Carolina.....	59,657.63	3.8	21,287.75	1.4	340,926.08	21.9	48,394.54	3.1	62,213.08	4.0
Tennessee.....	50,739.97	2.5	25,376.52	1.3	333,368.77	16.6	89,713.77	4.5	64,361.13	3.2
Texas.....	94,414.72	2.4	29,777.66	.8	423,277.24	10.9	190,996.80	4.9	163,645.91	4.2
Virginia.....	74,382.88	3.4	18,352.11	.8	426,359.27	19.2	52,051.36	2.4	53,449.20	2.4
Total.....	715,014.99	2.4	333,138.92	1.1	4,355,592.46	14.9	1,082,195.15	3.7	930,766.23	3.2
Illinois.....	84,598.22	2.9	24,917.03	.9	396,413.05	13.8	61,912.05	2.1	56,980.82	2.0
Indiana.....	63,359.31	2.6	68,665.70	2.8	498,314.79	20.1	48,225.75	1.9	24,829.21	1.0
Iowa.....	157,547.18	6.8	110,722.55	4.8	554,646.26	24.0	47,922.22	2.1	43,278.26	1.9
Kansas.....	38,869.07	1.7	6,903.00	.3	417,126.39	18.7	46,777.50	2.1	28,403.93	1.3
Michigan.....	75,469.32	3.4	39,493.95	1.7	639,953.63	28.6	51,292.30	2.3	37,449.97	1.7
Minnesota.....	31,112.30	1.9	13,718.44	.8	287,872.71	17.9	41,549.07	2.6	36,997.53	2.3
Missouri.....	35,415.17	1.6	8,334.23	.4	287,903.68	13.4	56,602.15	2.6	44,069.88	2.1
Nebraska.....	28,648.74	2.5	7,519.81	.7	244,499.73	21.7	43,751.24	3.9	28,361.03	2.5
North Dakota.....	20,648.96	2.6	2,901.32	.4	200,833.53	24.9	43,156.20	5.3	23,429.91	2.9



Ohio-----	47,397.94	2.5	26,992.23	1.4	395,746.56	20.7	47,406.10	2.5	959,048.47	50.2	34,874.87	1.8	327,867.81	17.2
South Dakota-----	28,987.72	3.4	12,103.07	1.4	160,899.49	19.1	24,272.44	2.9	399,336.60	47.4	13,877.00	1.6	146,379.81	17.4
Wisconsin-----	44,761.35	2.1	45,114.52	2.1	538,994.14	25.3	72,801.99	3.4	810,812.66	38.1	53,627.42	2.5	366,585.98	17.2
Total-----	656,815.28	2.9	367,385.85	1.6	4,623,203.96	20.3	585,669.01	2.6	9,421,801.59	41.5	426,179.83	1.9	4,336,256.31	19.1
Arizona-----	29,578.74	8.0	6,133.09	1.7	85,578.24	23.2	3,059.79	.8	161,910.90	43.8	2,582.80	.7	65,354.07	17.6
California-----	42,722.43	1.3	15,146.23	.5	450,473.35	14.0	81,331.58	2.5	1,935,693.10	60.0	44,308.08	1.4	590,958.45	18.3
Colorado-----	28,336.89	3.2	7,619.68	.8	183,234.90	20.5	41,722.57	4.7	389,657.38	43.7	11,649.52	1.3	137,481.81	15.4
Idaho-----	30,962.92	4.2	5,923.96	.8	157,310.89	21.6	27,052.57	3.7	319,088.56	43.7	12,533.14	1.7	92,604.63	12.7
Montana-----	36,191.49	4.5	13,758.92	1.7	192,011.44	23.8	28,536.68	3.5	327,589.93	40.6	12,665.07	1.6	164,459.93	20.4
Nevada-----	21,000.24	8.3	520.23	.2	30,999.37	12.3	12,869.66	5.1	85,354.07	33.7	11,195.09	4.4	42,103.32	16.7
New Mexico-----	26,286.94	3.5	6,069.85	.8	162,816.45	22.0	21,105.17	2.9	348,449.81	47.1	6,535.42	.9	147,813.71	20.0
Oregon-----	80,327.71	5.1	28,980.83	1.8	420,443.64	26.8	36,922.63	2.3	401,160.86	25.6	48,824.73	3.1	170,217.01	10.8
Utah-----	22,919.23	4.3	8,989.06	1.7	133,197.21	25.1	14,148.11	2.7	207,073.78	39.0	11,548.23	2.2	115,935.50	21.9
Washington-----	52,489.16	3.6	61,535.78	4.2	280,069.14	19.0	62,778.11	4.3	676,741.67	46.0	41,737.68	2.8	254,989.60	17.4
Wyoming-----	29,957.07	5.8	5,074.99	1.0	122,817.04	23.6	13,815.08	2.6	216,243.39	41.6	16,652.75	3.2	86,750.64	16.7
Total-----	400,772.82	3.6	159,752.62	1.4	2,218,951.67	20.0	343,341.95	3.1	5,068,963.45	45.7	220,232.51	2.0	1,868,668.67	16.8
Alaska-----	20,342.51	21.6	2,023.00	2.2	13,107.97	13.9	-----	-----	13,158.88	14.0	11,807.30	12.6	32,168.43	34.2
Hawaii-----	30,297.68	5.9	2,385.25	.5	139,828.61	27.5	5,438.49	1.1	187,356.31	36.9	17,331.81	3.4	113,595.99	22.3
Puerto Rico-----	58,007.66	5.7	5,950.52	.6	206,528.54	20.4	61,395.18	6.1	370,139.68	36.7	49,180.68	4.9	243,335.73	24.1
Grand total-----	2,484,209.16	3.2	1,081,305.61	1.4	15,198,582.10	19.6	2,276,733.85	2.9	31,955,706.00	41.2	1,900,873.66	2.5	16,856,316.78	21.7



TABLE 4.—Expenditures of funds from all sources for cooperative agricultural extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year 1950-51, by nature of expenditures—Continued

State	Boys' and girls' club work <sup>1</sup>				Total at college		Total in county		Miscellaneous		Totals
	Leadership		County								
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent	
Connecticut.....	18,961.38	3.0	113,652.00	18.0	253,831.65	40.2	377,243.84	59.8	-----	-----	631,075.49
Delaware.....	5,067.68	3.0	19,284.48	11.4	99,788.13	59.1	69,168.37	40.9	-----	-----	168,956.50
Maine.....	12,437.21	2.8	61,495.12	13.9	177,965.34	40.3	263,855.99	59.7	-----	-----	441,821.33
Maryland.....	28,918.34	3.0	39,664.18	4.2	543,797.38	57.2	407,158.44	42.8	-----	-----	950,955.82
Massachusetts.....	50,798.32	5.3	175,846.72	18.3	396,404.89	41.2	565,218.87	58.8	-----	-----	961,623.76
New Hampshire.....	13,536.67	3.7	83,180.65	23.0	150,422.50	41.6	210,835.96	58.4	-----	-----	361,258.46
New Jersey.....	25,036.86	2.8	154,069.69	17.0	284,079.61	31.3	624,099.64	68.7	-----	-----	908,089.25
New York.....	80,601.13	1.7	727,389.60	15.2	2,076,034.90	43.2	2,727,777.53	56.8	-----	-----	4,803,812.43
Pennsylvania.....	61,281.86	3.1	-----	-----	726,486.13	36.7	1,252,810.37	63.3	-----	-----	1,979,296.50
Rhode Island.....	9,859.46	6.7	28,742.32	19.4	74,273.83	50.2	73,654.01	49.8	-----	-----	147,927.84
Vermont.....	17,051.13	4.7	64,857.54	17.9	156,509.53	43.3	204,776.36	56.7	-----	-----	361,285.89
West Virginia.....	189,467.95	16.9	153,142.32	13.6	472,490.03	42.1	649,931.68	57.9	-----	-----	1,122,421.71
Total.....	513,017.99	4.0	1,621,324.62	12.6	5,412,083.92	42.2	7,426,441.06	57.8	-----	-----	12,838,524.98
Alabama.....	28,398.98	1.2	-----	-----	596,222.43	25.0	1,792,945.79	75.0	-----	-----	2,389,168.22
Arkansas.....	16,533.19	1.0	-----	-----	410,318.98	24.7	1,252,938.02	75.3	-----	-----	1,663,257.00
Florida.....	43,550.28	3.7	-----	-----	363,495.43	30.7	820,027.64	69.3	-----	-----	1,183,523.07
Georgia.....	64,023.30	2.8	-----	-----	568,119.47	25.0	1,708,326.20	75.0	-----	-----	2,276,445.67
Kentucky.....	79,515.63	3.9	-----	-----	514,810.86	25.2	1,524,823.00	74.8	-----	-----	2,039,633.86
Louisiana.....	36,380.64	1.8	-----	-----	549,496.45	27.9	1,421,592.62	72.1	-----	-----	1,971,089.07
Mississippi.....	55,265.13	2.4	-----	-----	643,316.70	28.2	1,639,425.36	71.8	-----	-----	2,282,742.06
North Carolina.....	66,466.15	1.7	-----	-----	922,339.69	23.3	3,034,178.12	76.7	-----	-----	3,956,517.81
Oklahoma.....	44,401.51	2.3	-----	-----	660,376.16	34.3	1,262,358.58	65.7	-----	-----	1,922,734.74
South Carolina.....	20,356.10	1.3	-----	-----	552,835.18	35.5	1,004,962.76	64.5	-----	-----	1,557,797.94
Tennessee.....	41,815.36	2.1	-----	-----	605,375.52	30.2	1,396,990.82	69.8	-----	-----	2,002,366.34
Texas.....	32,907.12	.9	-----	-----	935,019.45	24.1	2,938,476.21	75.9	-----	-----	3,873,495.66
Virginia.....	38,212.47	1.7	-----	-----	662,807.29	29.9	1,554,416.18	70.1	-----	-----	2,217,223.47
Total.....	567,825.86	1.9	-----	-----	7,984,533.61	27.2	21,351,461.30	72.8	-----	-----	29,335,994.91
Illinois.....	114,453.81	4.0	133,991.70	4.6	739,274.98	25.7	2,142,417.23	74.3	-----	-----	2,881,692.21
Indiana.....	74,338.49	3.0	311,612.96	12.6	777,733.25	31.4	1,696,993.69	68.6	-----	-----	2,474,726.94
Iowa.....	64,170.06	2.8	225,600.79	9.8	978,286.53	42.4	1,328,709.09	57.6	-----	-----	2,306,995.62
Kansas.....	48,724.37	2.2	240,055.69	10.7	586,804.26	26.3	1,648,484.22	73.7	-----	-----	2,235,288.48
Michigan.....	100,725.73	4.5	273,245.13	12.2	944,384.90	42.2	1,292,878.56	57.8	-----	-----	2,237,263.46
Minnesota.....	72,703.35	4.5	178,994.18	11.1	483,953.40	30.0	1,127,384.92	70.0	-----	-----	1,611,338.32
Missouri.....	51,437.03	2.4	-----	-----	483,762.14	22.5	1,667,086.90	77.4	-----	0.1	2,154,285.96
Nebraska.....	41,145.31	3.6	-----	-----	393,925.86	34.9	733,964.27	65.1	-----	-----	1,127,890.13
North Dakota.....	36,580.62	4.5	5,727.82	.7	327,550.54	40.6	479,335.96	59.4	-----	-----	806,886.50
Ohio.....	39,480.88	2.1	29,726.22	1.6	591,898.58	31.0	1,316,642.50	69.0	-----	-----	1,908,541.08



South Dakota.....	56, 913. 82	6. 8	-----	-----	297, 053. 54	35. 2	545, 716. 41	64. 8	-----	-----	-----	842, 769. 95
Wisconsin .....	50, 089. 93	2. 4	-----	147, 507. 38	6. 9	805, 389. 35	37. 8	1, 324, 906. 02	62. 2	-----	-----	2, 130, 295. 37
Total.....	750, 763. 40	3. 3	-----	1, 546, 461. 87	6. 8	7, 410, 017. 33	32. 6	15, 304, 519. 77	67. 4	-----	3, 436. 92	22, 717, 974. 02
Arizona.....	15, 670. 86	4. 2	-----	-----	-----	142, 603. 52	38. 6	227, 264. 97	61. 4	-----	-----	369, 863. 49
California.....	65, 539. 82	2. 0	-----	-----	-----	699, 521. 49	21. 7	2, 526, 651. 55	78. 3	-----	-----	3, 226, 173. 04
Colorado.....	18, 811. 90	2. 1	-----	-----	-----	291, 375. 46	32. 6	601, 551. 86	67. 4	-----	-----	892, 927. 32
Idaho.....	26, 454. 18	3. 6	-----	74, 412. 67	8. 3	260, 237. 66	35. 6	470, 303. 49	64. 4	-----	-----	730, 541. 15
Montana.....	28, 064. 11	3. 5	-----	58, 610. 30	8. 0	311, 227. 71	38. 6	492, 049. 86	61. 0	-----	2 2, 797. 19	806, 074. 76
Nevada.....	15, 289. 42	6. 0	-----	33, 634. 01	13. 3	91, 874. 01	36. 3	161, 091. 40	63. 7	-----	-----	252, 965. 41
New Mexico.....	20, 818. 43	2. 8	-----	-----	-----	243, 632. 26	32. 9	496, 263. 52	67. 1	-----	-----	739, 895. 78
Oregon.....	71, 691. 81	4. 6	-----	266, 827. 25	17. 0	687, 191. 35	43. 7	838, 205. 12	53. 4	-----	2 45, 599. 71	1, 570, 996. 18
Utah.....	16, 575. 64	3. 1	-----	-----	-----	207, 377. 48	39. 1	323, 009. 28	60. 9	-----	-----	530, 386. 76
Washington.....	39, 350. 82	2. 7	-----	-----	-----	537, 960. 69	36. 6	931, 731. 27	63. 4	-----	-----	1, 469, 691. 96
Wyoming.....	28, 414. 62	5. 5	-----	-----	-----	216, 731. 55	41. 7	302, 994. 03	58. 3	-----	-----	519, 725. 58
Total.....	346, 681. 61	3. 1	-----	433, 484. 23	3. 9	3, 689, 733. 18	33. 2	7, 371, 116. 35	66. 4	-----	48, 396. 90	11, 109, 246. 43
Alaska.....	1, 426. 23	1. 5	-----	-----	-----	48, 707. 01	51. 8	45, 327. 31	48. 2	-----	-----	94, 034. 32
Hawaii.....	12, 110. 35	2. 4	-----	-----	-----	207, 392. 19	40. 8	300, 952. 30	59. 2	-----	-----	508, 344. 49
Puerto Rico.....	15, 205. 35	1. 5	-----	-----	-----	396, 267. 93	39. 2	613, 475. 41	60. 8	-----	-----	1, 009, 743. 34
Grand total.....	2, 207, 030. 79	2. 8	-----	3, 601, 270. 72	4. 6	25, 148, 735. 17	32. 4	52, 413, 293. 50	67. 5	-----	51, 833. 82	77, 613, 862. 49

<sup>1</sup> Does not include cost of extension workers who devoted part time to 4-H Club work. Estimated total expended for 4-H Club work, \$25,800,000.

<sup>2</sup> Retirement.



TABLE 5.—Unexpended balances of Federal Extension funds for the fiscal year ended June 30, 1951

State	Capper-Ketcham	Bankhead-Jones	Bankhead-Flannagan	Total	State	Capper-Ketcham	Bankhead-Jones	Bankhead-Flannagan	Total
Arizona.....				\$6,827.11	Ohio.....		\$1,924.08	\$2,865.95	\$4,790.03
Arkansas.....				29,573.50	Pennsylvania.....			845.01	2,818.28
Florida.....		\$3,495.77		5,549.37	Rhode Island.....		2,818.28		10,388.06
Georgia.....			15.46	15.46	South Dakota.....		666.68	9,721.38	428.19
Idaho.....			1,170.31	1,170.31	Utah.....		428.19		1,059.06
Kansas.....			100.00	100.00	Washington.....		1,059.06		
Maryland.....	\$2.57			2.57	West Virginia.....	\$8.23		.78	9.01
Massachusetts.....		638.89	631.19	1,270.08	Wisconsin.....			2,929.03	2,929.03
Minnesota.....			8,814.68	8,814.68	Hawaii.....			4,306.18	4,306.18
Montana.....		94.74	71.39	166.13	Puerto Rico.....	3.00	624.08	1.03	628.11
New York.....	11.26	891.85	230.84	1,133.95	Total.....	25.06	14,504.04	74,967.81	89,496.91
North Dakota.....		1,862.42	4,810.37	6,672.79					



TABLE 6.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ending June 30, 1953

State	Grand total	Total Federal funds	Total within the States	Funds from Federal sources			
				Smith-Lever	Bankhead-Jones Section 21 Title II	Bankhead-Jones Section 23 Title II	Capper-Ketcham
Alabama-----	\$2, 432, 693.17	\$1, 212, 393.17	\$1, 220, 300.00	\$140, 100.44	\$502, 475.28	\$514, 435.98	\$35, 820.71
Arizona-----	434, 959.00	183, 877.45	251, 081.55	35, 220.63	61, 113.21	63, 836.68	23, 066.93
Arkansas-----	1, 725, 164.55	996, 437.55	728, 727.00	106, 691.93	419, 860.17	426, 348.18	31, 758.11
California-----	3, 863, 386.00	723, 453.85	3, 139, 932.15	164, 747.24	260, 837.46	256, 791.30	38, 817.85
Colorado-----	1, 066, 754.16	357, 677.16	709, 077.00	47, 331.24	110, 836.10	141, 853.37	24, 539.62
Connecticut-----	587, 465.18	173, 709.90	413, 755.28	43, 918.99	57, 650.95	40, 145.07	24, 124.68
Delaware-----	182, 194.60	101, 702.39	80, 492.21	18, 994.12	36, 515.26	18, 459.29	21, 093.72
Florida-----	1, 314, 697.67	365, 763.70	948, 933.97	82, 384.75	129, 651.51	121, 915.18	28, 802.26
Georgia-----	2, 638, 822.50	1, 259, 860.50	1, 378, 962.00	152, 524.13	511, 293.31	523, 838.15	37, 331.48
Idaho-----	779, 278.17	277, 833.17	501, 445.00	35, 409.72	92, 773.63	119, 594.39	23, 089.92
Illinois-----	2, 992, 652.72	968, 820.72	2, 023, 832.00	157, 648.14	371, 653.23	374, 947.87	37, 954.58
Indiana-----	2, 326, 205.59	804, 711.59	1, 521, 494.00	129, 230.20	313, 278.64	312, 706.35	34, 498.85
Iowa-----	2, 544, 994.27	903, 636.27	1, 641, 358.00	113, 588.18	354, 375.33	356, 525.41	32, 596.72
Kansas-----	2, 527, 313.09	657, 720.09	1, 869, 593.00	78, 957.15	238, 032.79	245, 755.97	28, 385.45
Kentucky-----	2, 159, 944.30	1, 152, 263.41	1, 007, 680.89	150, 679.76	473, 004.01	483, 012.44	37, 107.20
Louisiana-----	2, 187, 413.19	796, 870.16	1, 390, 543.03	101, 618.88	326, 764.51	327, 085.57	31, 141.20
Maine-----	452, 181.91	227, 778.11	224, 403.80	43, 400.04	83, 322.64	72, 517.33	24, 061.57
Maryland-----	1, 343, 249.17	308, 856.17	1, 034, 393.00	64, 971.86	108, 235.27	94, 080.25	26, 684.79
Massachusetts-----	1, 106, 389.48	233, 858.77	872, 530.71	65, 287.58	72, 883.76	56, 386.95	26, 723.18
Michigan-----	2, 649, 941.28	888, 422.38	1, 761, 518.90	151, 280.51	332, 829.40	333, 552.22	37, 180.25
Minnesota-----	1, 771, 208.27	855, 349.75	915, 858.52	112, 638.14	348, 555.43	350, 319.99	32, 481.19
Mississippi-----	2, 706, 891.73	1, 246, 654.38	1, 460, 237.35	128, 831.31	524, 051.38	537, 441.35	34, 450.34
Missouri-----	2, 310, 038.70	1, 039, 751.78	1, 270, 286.92	125, 065.15	424, 282.66	431, 063.63	33, 992.36
Montana-----	915, 340.67	289, 070.20	626, 270.47	35, 175.50	83, 243.96	107, 433.45	23, 061.44
Nebraska-----	1, 410, 199.59	543, 298.76	866, 900.83	63, 195.61	198, 975.81	197, 131.74	26, 468.79
Nevada-----	244, 948.22	118, 373.88	126, 574.34	15, 175.72	25, 698.11	43, 075.58	20, 629.39
New Hampshire-----	404, 553.65	133, 170.47	271, 383.18	27, 119.55	45, 320.00	28, 997.28	22, 081.80
New Jersey-----	1, 080, 970.53	221, 643.80	859, 326.73	59, 076.45	71, 390.79	54, 795.08	25, 967.88
New Mexico-----	781, 140.00	270, 567.73	510, 572.27	35, 652.41	84, 068.40	111, 312.49	23, 119.43
New York-----	4, 383, 585.95	805, 139.33	3, 578, 446.62	172, 378.97	282, 400.98	279, 783.26	39, 745.90



TABLE 6.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ending June 30, 1953—Continued

State	Grand total	Total Federal funds	Total within the States	Funds from Federal sources			
				Smith-Lever	Bankhead-Jones Section 21 Title II	Bankhead-Jones Section 23 Title II	Capper-Ketcham
North Carolina.....	\$4, 216, 803. 43	\$1, 521, 430. 43	\$2, 695, 373. 00	\$213, 665. 15	\$616, 134. 72	\$635, 624. 59	\$44, 766. 46
North Dakota.....	863, 670. 16	417, 213. 66	446, 456. 50	44, 386. 30	137, 807. 12	160, 611. 04	24, 181. 51
Ohio.....	2, 154, 986. 31	1, 069, 654. 31	1, 085, 332. 00	189, 057. 82	411, 078. 06	416, 984. 32	41, 774. 11
Oklahoma.....	1, 946, 709. 97	907, 507. 86	1, 039, 202. 11	92, 701. 34	354, 232. 35	356, 372. 97	30, 056. 80
Oregon.....	1, 878, 512. 04	341, 308. 85	1, 537, 203. 19	63, 076. 00	112, 951. 25	134, 108. 63	26, 454. 24
Pennsylvania.....	2, 309, 188. 62	1, 000, 498. 62	1, 308, 690. 00	243, 993. 69	348, 623. 69	350, 392. 77	48, 454. 53
Rhode Island.....	173, 858. 48	75, 769. 96	98, 088. 52	19, 426. 65	26, 217. 56	6, 629. 43	21, 146. 32
South Carolina.....	1, 791, 410. 61	853, 029. 34	938, 381. 27	111, 242. 26	349, 274. 61	351, 086. 81	32, 311. 44
South Dakota.....	973, 439. 50	409, 233. 50	564, 206. 00	42, 965. 77	130, 397. 99	147, 711. 11	24, 008. 76
Tennessee.....	2, 141, 430. 64	1, 160, 642. 64	980, 788. 00	149, 045. 19	478, 227. 94	488, 582. 42	36, 908. 43
Texas.....	4, 169, 461. 78	1, 988, 676. 00	2, 180, 785. 78	227, 221. 46	795, 775. 47	827, 165. 32	46, 414. 96
Utah.....	548, 362. 96	215, 382. 96	332, 980. 00	28, 069. 97	57, 596. 34	80, 086. 85	22, 197. 83
Vermont.....	422, 784. 98	170, 030. 99	252, 753. 99	28, 155. 25	58, 269. 54	52, 804. 64	22, 207. 75
Virginia.....	2, 543, 896. 02	940, 637. 31	1, 603, 258. 71	142, 955. 19	374, 361. 83	377, 835. 89	36, 167. 86
Washington.....	1, 362, 723. 82	414, 991. 91	947, 731. 91	76, 214. 07	142, 282. 78	158, 383. 18	28, 051. 88
West Virginia.....	1, 070, 328. 37	562, 848. 37	507, 480. 00	109, 122. 23	211, 331. 54	204, 005. 96	32, 053. 64
Wisconsin.....	2, 254, 683. 68	857, 538. 68	1, 397, 145. 00	119, 375. 85	337, 178. 24	338, 189. 14	33, 300. 52
Wyoming.....	594, 351. 35	182, 949. 53	411, 401. 82	21, 031. 51	46, 185. 03	72, 919. 61	21, 341. 47
Alaska.....	120, 498. 00	60, 498. 00	60, 000. 00	17, 300. 00	20, 808. 00	862. 00	20, 888. 00
Hawaii.....	509, 223. 82	187, 928. 30	321, 295. 52	21, 713. 00	66, 699. 96	49, 793. 52	21, 424. 35
Puerto Rico.....	1, 200, 464. 73	671, 763. 55	528, 701. 18	109, 487. 02	408, 000. 00	101, 090. 00	32, 131. 00
Unallotted.....	21, 907. 66	21, 907. 66	-----	-----	-----	15, 570. 00	-----
Grand total.....	84, 593, 274. 24	32, 150, 109. 02	52, 443, 165. 22	4, 728, 500. 02	12, 428, 808. 00	12, 351, 952. 00	1, 533, 019. 00



TABLE 6.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ending June 30, 1953—Continued

State	Funds from Federal sources—Continued				Funds from within the States		
	Additional Cooperative	Clarke- McNary forestry	Farm housing Title V Housing Act of 1949	Agricultural Marketing Act <sup>1</sup> (RMA- Title II)	State and college	County	Local nonpublic sources
Alabama	\$3,724.15	\$1,620.00	\$640.00	\$13,576.61	\$641,500.00	\$578,800.00	
Arizona			640.00		205,439.05	45,642.50	
Arkansas	6,949.16	1,620.00	640.00	2,570.00	459,050.00	262,677.00	\$7,000.00
California		1,620.00	640.00		2,130,312.15	1,009,620.00	
Colorado	27,395.83	1,260.00	640.00	3,821.00	381,000.00	328,077.00	
Connecticut		1,620.00	640.00	5,610.21	214,697.28	176,098.00	22,960.00
Delaware			640.00	6,000.00	71,501.00	4,116.21	4,875.00
Florida		1,620.00	640.00	750.00	491,620.97	457,313.00	
Georgia	26,432.70	3,240.00	640.00	4,560.73	750,000.00	624,262.00	4,700.00
Idaho	3,445.51	2,880.00	640.00		258,995.00	228,450.00	14,000.00
Illinois	10,736.90	3,240.00	640.00	12,000.00	756,832.00	10,000.00	1,257,000.00
Indiana		1,620.00	640.00	12,737.55	845,850.00	675,644.00	
Iowa	28,020.63	3,240.00	640.00	14,650.00	831,358.00	530,000.00	280,000.00
Kansas	50,228.73	1,620.00	640.00	14,100.00	419,832.00	1,422,711.00	27,050.00
Kentucky		1,620.00	640.00	6,200.00	633,061.69	374,619.20	
Louisiana		1,620.00	640.00	8,000.00	1,179,647.25	204,615.78	6,280.00
Maine	2,216.53	1,620.00	640.00		169,453.80	54,950.00	
Maryland		1,620.00	640.00	12,624.00	831,236.00	203,157.00	
Massachusetts		1,620.00	640.00	10,317.30	319,056.00	553,474.71	
Michigan		3,240.00	640.00	29,700.00	1,307,241.90	454,277.00	
Minnesota		3,240.00	640.00	7,475.00	400,258.52	475,600.00	40,000.00
Mississippi		3,240.00	640.00	18,000.00	775,000.00	618,808.00	66,429.35
Missouri	1,686.98	1,620.00	640.00	21,401.00	676,960.88	405,814.33	187,511.71
Montana	32,217.74	1,260.00	640.00	6,038.11	302,383.47	308,712.00	15,175.00
Nebraska	49,781.81	1,620.00	640.00	5,485.00	476,900.83	390,000.00	
Nevada	11,955.08	1,200.00	640.00		61,750.34	64,824.00	
New Hampshire	1,134.54	1,620.00	640.00	6,257.30	163,421.18	107,962.00	
New Jersey		1,620.00	640.00		449,743.00	409,583.73	
New Mexico	8,153.60		640.00	15,775.00	401,422.27	107,650.00	1,500.00
New York		3,240.00	640.00	26,950.22	1,670,606.62	1,660,422.00	247,418.00



TABLE 6.—Sources of funds allotted for cooperative extension work in States, Alaska, Hawaii, and Puerto Rico, for the fiscal year ending June 30, 1953—Continued

State	Funds from Federal sources—Continued					Funds from within the States		
	Additional Cooperative	Clarke- McNary forestry	Farm housing Title V Housing Act of 1949	Agricultural Marketing Act <sup>1</sup> (RMA- Title II)	State and college	County	Local nonpublic sources	
North Carolina		\$1,620.00	\$640.00	\$8,979.51	\$1,669,123.00	\$1,022,750.00	\$3,500.00	
North Dakota	\$38,705.53	1,620.00	640.00	9,262.16	142,870.50	303,586.00		
Ohio		1,620.00	640.00	8,500.00	545,698.00	506,468.00	33,166.00	
Oklahoma	51,344.98	1,620.00	640.00	20,539.42	790,071.00	249,131.11		
Oregon		1,620.00	640.00	2,458.73	1,178,661.19	358,542.00		
Pennsylvania		1,620.00	640.00	6,773.94	978,690.00	330,000.00		
Rhode Island				2,350.00	75,532.57	19,550.00	3,005.95	
South Carolina	2,352.22	3,240.00	640.00	2,882.00	829,750.00	101,391.27	7,240.00	
South Dakota	59,839.87	1,620.00	640.00	2,050.00	366,848.00	191,248.00	6,110.00	
Tennessee		1,620.00	640.00	5,618.66	610,514.00	368,344.00	1,930.00	
Texas	82,238.79	1,620.00	640.00	7,600.00	788,989.66	1,389,574.12	2,222.00	
Utah	13,607.42	1,260.00	640.00	11,925.00	230,000.00	102,980.00		
Vermont	5,453.81	1,300.00	640.00	1,200.00	167,200.00	75,029.00	10,524.99	
Virginia		3,240.00	640.00	5,436.54	1,262,642.71	340,616.00		
Washington		1,620.00	640.00	7,800.00	545,982.98	401,748.93		
West Virginia		1,620.00	640.00	4,075.00	362,480.00	140,000.00	5,000.00	
Wisconsin	1,214.93	3,240.00	640.00	24,400.00	532,132.00	865,013.00		
Wyoming	19,571.91	1,260.00	640.00		281,129.82	130,272.00		
Alaska			640.00		60,000.00			
Hawaii	16,590.65		640.00	11,066.82	321,295.52			
Puerto Rico		1,620.00	640.00	18,795.53	528,701.18			
Unallotted			1,050.00	5,287.66				
Grand total	555,000.00	88,180.00	33,050.00	431,600.00	30,544,443.33	19,644,123.89	2,254,598.00	

<sup>1</sup> Preliminary distribution. Excludes regional contract sec. 205.